

19971114.qrp v00_n909.qrs.971114

Date: Fri, 14 Nov 1997 19:03:49 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 909

QRP-L Digest 909

Topics covered in this issue include:

- 1) [30719] Jim Cates e-mail address
by "Watson R Gabriel Jr" <wgabriel@duke-energy.com>
- 2) [30719] Re: QRPp mailing
by Joe Gervais <vole@primenet.com>
- 3) [30719] Solar Flux starting back up
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 4) [30719] Re: 73 Magazine
by "Mike Pender" <steam@megsinet.net>
- 5) [30720] Re: Re[2]: What's at 4.1943 MHz?
by Jack Wilson <JackW@travsoft.com>
- 6) [30721] Yet Another Building Contest
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 7) [30722] Re: Lookup and Long/Lat
by kt3a@juno.com
- 8) [30723] Re: Concerns about "Border Operations" Theme
by kt3a@juno.com
- 9) [30724] I'm the Novice/Tech fox on Sunday night
by "Johnson" <johns516@maroon.tc.umn.edu>
- 10) [30719] Key Info
by Tim Cook <timcook@erinet.com>
- 11) [30720] QRP ARCI Board Elections
by "Kenneth W. Evans" <w4du@bellsouth.net>
- 12) [30719] QTH centered maps
by Dave Marling <dbm@klis.com>
- 13) [30719] re: 73 magazine
by "Phil, K6LS" <k6ls@amsat.org>
- 14) [30719] Re: QRPp mailing
by ka7you@juno.com
- 15) [30720] ANTENNA BASICS
by ARDUJENSKI@aol.com
- 16) [30719] ahh..memories or, what got me started in qrp.
by "Phil, K6LS" <k6ls@amsat.org>
- 17) [30720] Incorrect power formula in QRPp article
by Mike Czuhajewski <wa8mcq@u1.abs.net>
- 18) [30721] I'm the Novice/Tech fox on Sunday night
by ki7mn@dancris.com
- 19) [30722] Re: I'm the Novice/Tech fox on Sunday night

- by Monte Stark <ku7y@sage.dri.edu>
- 20) [30723] Re: Key Info
by "CHRIS" <guardian@mvtel.net>
- 21) [30724] More 4013
by sigcom@juno.com (Stephen M Smith)
- 22) [30725] Merits of Crazy Glue - AUTEK RF-1
by "Bob Kellogg" <ae4ic@nr.infi.net>
- 23) [30725] KB0VRV Young&Old Foxes
by flydnq7x@primenet.com (Floyd Smithberg)
- 24) [30726] RE: KB0VRV, N/T FOX for 11/17
by Mike Stapp <stapp001@gold.tc.umn.edu>
- 25) [30726] Another 2222 book Special Offer
by "Bill Kelsey - N8ET - Kanga US" <kanga@mail.bright.net>
- 26) [30727] Re: Comdex
by Monte Stark <ku7y@sage.dri.edu>
- 27) [30728] Re: Merits of Crazy Glue - AUTEK RF-1
by Roger Hightower <n7kt@dancris.com>
- 28) [30728] ACCORDING TO HOYLE...
by ARDUJENSKI@aol.com
- 29) [30729] Bulgaria/LZ1BB Reading Materials Needed
by Adrian Weiss <aweiss@sunflowr.usd.edu>
- 30) [30730] QRPttf 98 Theme
by wa5whn@juno.com
- 31) [30731] Re: Z Match tuner schematic ?
by FAITHD@dnr.state.wi.us (Don C. Faith III, AM/7, \ (608\) 267-3135)
- 32) [30732] Re: Molasses Cookie Archeology. (definitely QRP research)
by k5zty@juno.com
- 33) [30733] re: For Sale (HW-7)
by k5zty@juno.com
- 34) [30734] re: Z-Match tuner schematic
by k5zty@juno.com
- 35) [30735] Re: QRPttf 98 Theme
by William McFadden <wmcfadde@oucsace.cs.ohiou.edu>
- 36) [30736] Border Operations
by AlK0FRP@aol.com
- 37) [30737] Re: Merits of Crazy Glue - AUTEK RF-1
by kv7g@juno.com
- 38) [30738] SGC 2020
by "Thomas J.McCuen" <TMcCuen@compuserve.com>
- 39) [30739] LED flashlight, homebrew
by Philip Karras 827-2956 <PXX4@CDRH.FDA.GOV>
- 40) [30740] Re: link tuners size disadvantage
by PaulKB8N@aol.com
- 41) [30741] Re: ANTENNA BASICS
by Zack Lau <zlau@arrl.org>
- 42) [30742] Which Side of the Border is a Station Near the Border Located?
by ji3m@maxwell.com (James R. Duffey)
- 43) [30743] Re: Border Operations

by Zack Lau <zlau@arrl.org>
44) [30744] Best Antenna Tuner Configuration for Short Random Wires????
by James P Rybak <jrybak@mesa7.mesa.colorado.edu>
45) [30745] Re: 73 Magazine
by Brian Kassel <bkassel@dancris.com>
46) [30745] Re: 73 Magazine
by Al Moyle <moyle@essc.psu.edu>
47) [30746] Re: link tuners size disadvantage
by Brian Kassel <bkassel@dancris.com>
48) [30747] Re: Border Operations
by n4js@pobox.com
49) [30748] EMTECH ZM-1 has a future!
by "Michael Fletcher" <kl7ixi@mailcity.com>
50) [30748] FOX SUMMARY Nov 14th
by adams@chuck.dallas.sgi.com (Chuck Adams)
51) [30749] Re: W1VT/KH6 15M operation
by Zack Lau <zlau@arrl.org>
52) [30750] Spice
by Stanley Wilson <microres@crl.com>
53) [30751] Re: Spice
by Jim Eshleman <lujce@hooch.cc.Lehigh.EDU>
54) [30752] FOX SCORES V2.0 Nov 14th
by adams@chuck.dallas.sgi.com (Chuck Adams)
55) [30753] TEST: radio shack pocket dvm
by torell@sicom.com (Kent Torell)
56) [30754] Re: 73 Magazine
by Steven Weber <kd1jv@moose.ncia.net>
57) [30755] RE: Boarder operation
by Steven Weber <kd1jv@moose.ncia.net>
58) [30755] FS:HW-8 & HW Handbook
by Steve Galchutt <n0tu@webaccess.net>
59) [30756] 2N2222(A) SPICE models
by adams@chuck.dallas.sgi.com (Chuck Adams)
60) [30757] Re: Boarder operation
by Ed Loranger <we6w@qsl.net>
61) [30758] Re: Spice
by Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
62) [30758] Re: 73 Magazine
by Gary M Diana <gmdiana@kodak.com>
63) [30758] Re: 73 Magazine
by gsurrency@juno.com (Gary Surrency)
64) [30759] Ponderings/note to Chas.
by n5inz@juno.com (John M Andrews)
65) [30760] More mods for the HW-9 (LONG)
by gsurrency@juno.com (Gary Surrency)
66) [30759] Call _history_ servers?
by Bill Acito 14-Nov-1997 1524 <acito@asdg.UNET.dec.com>
67) [30759] Re: link tuners size disadvantage

- by "Bob Kellogg" <ae4ic@nr.infi.net>
- 68) [30760] Re: 73 Magazine
by Terres Family <terresfm@ncia.net>
- 69) [30761] CW Reflector
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 70) [30762] Contest: Rotten parts in shack
by n5inz@juno.com (John M Andrews)
- 71) [30763] 6M QRP article in NORCAL QRPp
by Jim <kj5tf@mctc.com>
- 72) [30764] Fox: calls heard, KI7MN fox
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 73) [30763] 73 Magazine, Wanye Green and the Past & Future
by nq2rp@juno.com (B/BAMS Club Station)
- 74) [30763] Re: 73 Magazine
by Brian Kassel <bkassel@dancris.com>
- 75) [30763] re: wood handles for your paddles
by "Phil, K6LS" <k6ls@amsat.org>
- 76) [30764] RE: 6M QRP article in NORCAL QRPp
by "chuck munce" <k0gjx@classic.msn.com>
- 77) [30765] RE: link tuners size disadvantage
by "chuck munce" <k0gjx@classic.msn.com>
- 78) [30764] qrp stations in IA,NE,SD,MN
by Jerrydeen@aol.com
- 79) [30765] re:rotten parts contest
by n5inz@juno.com (John M Andrews)

Date: Thu, 13 Nov 1997 19:10:25 -0500
From: "Watson R Gabriel Jr" <wgabriel@duke-energy.com>
To: qrp-l@Lehigh.EDU
Subject: [30719] Jim Cates e-mail address
Message-ID: <8525654F.0000B5C2.00@dpcmail.dukepower.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII

Can someone supply this or confirm that it is still "@juno.com" please?
Need to send Jim a note and I thought I remember seeing it listed
differently fairly recently.

Thanks, Watson/WB4EXW

Date: Thu, 13 Nov 1997 17:23:03 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [30719] Re: QRPp mailing
Message-ID: <199711140023.RAA15090@usr09.primenet.com>

Howdy,

Mike (KL7IXI) wrote:

>
> What's wrong with this picture? Folks in Texas and on the east coast
> getting their copy of QRPp before a new member only 590 miles to the
> the north of Sacramento?
> ...
> Where's my copy???

Well Mike, they probably found out you were a ScQRPion and
sent your issue to AZ ScQRPion HQ. If you show up to the
next meeting, we'll turn it over to ya. :-)

Remember, you can take the ScQRPion out of AZ, but you can't
take AZ out of the ScQRPion.... :)

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"If it ain't fun, you ain't doin' it right!" -The AZ ScQRPions

Date: Fri, 14 Nov 1997 00:38:18 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-1@Lehigh.EDU
Subject: [30719] Solar Flux starting back up
Message-ID: <199711140038.AAA01167@chuck.dallas.sgi.com>

IV. PENTICTON 10.7 CM FLUX
OBSERVED 13 NOV 090
PREDICTED 14 NOV-16 NOV 092/092/094
90 DAY MEAN 13 NOV 090

FYI
Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/index.html>

Date: Thu, 13 Nov 1997 18:37:15 -0600
From: "Mike Pender" <steam@megsinet.net>
To: <SNickrand@aol.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [30719] Re: 73 Magazine
Message-ID: <01bcf095\$746b1760\$dc9651d1@ns1.megsinet.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I used to subscribe to the rag. A couple years ago, they kept billing me for MONTHS for a subscription that was paid up. I kept calling and writing, to no avail. Finally after many months, I got some cheesy letter that their bookmaking needed upgrading, or something to that effect.

After that fiasco, Old Wayne and crew can make their money hawking b-class CD's and Make-Money-Now books, cause ain't a penny of mine going their way.

Mike Pender Chicago, Illinois, U.S.A.
steam@megsinet.net or N9IVO@Amsat.org
Fax: 708-795-7003
Amateur Radio Call: N9IVO W.A.S. DXCC 10X-66444
A.M.A. 529703
I.B.E.W. Local 9 Lineman 17 years.

Date: Thu, 13 Nov 1997 16:45:43 -0800
From: Jack Wilson <JackW@travsoft.com>
To: qrp-1@Lehigh.EDU
Subject: [30720] Re: Re[2]: What's at 4.1943 MHz?
Message-ID: <F186733CDF44D1119DA000805FBB40C7050F39@EXCH1_BOTHELL>
MIME-Version: 1.0
Content-Type: text/plain

Speaking of crystals and crystal filters, can someone recommend a good textbook on the theory of designing with crystals? I'd like to know

more on how to design crystal filters and the effects of capacitance
etc...

Thanks,

Jack (KC7VL0)

Jack Wilson (jackw@travsoft.com)
Principal Software Engineer
Traveling Software Inc.
Bothell, WA USA

Date: Fri, 14 Nov 1997 00:45:27 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-1@Lehigh.EDU
Subject: [30721] Yet Another Building Contest
Message-ID: <199711140045.AAA01225@chuck.dallas.sgi.com>

To the QRP community at large.

FIRST ANNUAL HAMCOM HB XCVR Building Contest
(10 rule contest)

June 6, 1998 Arlington Convention Center
Arlington, TX

Whereas Dayton, Pacificon, NorCal, Ft Tuthill, and other meets have
or will have a building contest(s) it has been decided that the NORTEX
QRP Club should also sponsor such an activity in order to invite the
experimental QRPer to come forth with their handiwork in the south
central region of the US.

10 Rules.

1. Complete Homebrew Transceivers (no kits) only to level the playing
field and make judging easier.
2. Transistors only, i.e. no ICs except for voltage regulators.
NPN and/or PNP transistors and not limited to one type or part number.
No limit on quantity of parts. Zeners, etc. are allowed.

We will look into sometime in January adding another class for
those that might want to enter a xcvr with standard ICs included.

Email to adams@sgil.com if you are interested in this classification.

3. Ugly construction, PC board, builders choice.
4. TUF-1 or SBL-X or similar mixers allowed.
5. Any band(s) and any mode(s).
6. All construction to be done between Nov 1, 1997 and date of contest.
7. Power output limited to 5.0W maximum. Not adjustable to a higher level. Interest in QRP or QRPP class of rigs only.
8. Complete set of schematics and supporting documentation with 10 page limit. The judges won't have time to read anyway, if they can read at all. :-)
9. Readily available parts via mail order from one or more current businesses and using no obsolete/esoteric/expensive/.... components.
10. Entries judged on arbitrary set of qualities as yet to be determined. And rig should be fully functional in time for the contest. We do want to measure the output and play with it.

Awards to be given to top entry in two classes, QRP and QRPP.

QRP <= 5.0W output

QRPP <= 1.0W output

Let's not try to make this complicated.

Also, Joe Spencer, KK5NA, will announce later information about a special event station, forums, hospitality suite, dinner at a local restaurant, etc. as the time approaches. Doc Drake, W5TB, will be working on the hospitality suite and gathering last I heard. Stay tuned for those of you in the neighboring states who might want to attend. I'll work on getting Doug KI6DS back and Paul NA5N to continue the battle between the states and some discussions of current topics.

Film at 11.

Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/index.html>

Date: Thu, 13 Nov 1997 19:47:13 EST
From: kt3a@juno.com
To: lujce@hooch.CC.Lehigh.EDU
Cc: qrp-1@Lehigh.EDU
Subject: [30722] Re: Lookup and Long/Lat
Message-ID: <19971113.194619.4719.6.kt3a@juno.com>

What's cool about the info is that it includes
Area Codes! We now have two contests
that use the area codes for a contest exchange.
The doghouse this month and the TAContest (June).

Cameron C.R. Bailey <><
Amateur Radio, KT3A
kt3a@juno.com
Mount Wolf, Pennsylvania

Date: Thu, 13 Nov 1997 19:47:13 EST
From: kt3a@juno.com
To: wmcfadde@oucsace.cs.ohiou.edu
Cc: qrp-1@Lehigh.EDU
Subject: [30723] Re: Concerns about "Border Operations" Theme
Message-ID: <19971113.194618.4719.5.kt3a@juno.com>

I share some of the concerns that William made known.
As a VHF'er too, I am familiar with the 100 meter move.
If there is a group effort, perhaps two operations could
take place "near" a border, each one being actually IN
the state of operation. For instance, our club could operate
with 2 stations, each separated by 100 meters with one
station in MD and the other in PA. I don't know if there
is any reason that the call would not be permitted to be used
by both stations as it is a club call.

Also, I think the discussion left the "Border" and became
replaced by discussions of "state line" operations.

Comments?

Cameron C.R. Bailey <><
Amateur Radio, KT3A
kt3a@juno.com
Mount Wolf, Pennsylvania

Date: Thu, 13 Nov 1997 18:44:39 -0600
From: "Johnson" <johns516@maroon.tc.umn.edu>
To: <qrp-1@Lehigh.EDU>
Subject: [30724] I'm the Novice/Tech fox on Sunday night
Message-ID: <346ba09b0084039@mhub2.tc.umn.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hello. My name is Tim, and I am going to be the next Novice/Tech fox.
I will be near 7.122 on Sunday night at 7:00 CST (Nov 17 0100-0300 UTC).
I will be using the simple exchange of RST, Name and State.
I will use RIT offset if necessary.

I am 12 years old. I live in St. Paul Minnesota.
I got my tech license when I was 10, and my tech plus license when I was
11. I passed my written General exam in April, and now am practicing code
to get my speed up to 13. I hope this fox hunt will help. My speed is now
about 8 to 10.

My dad, Craig (AA0ZZ), will be logging for me, but he wants me to do all
the rest myself.

Hope to hear from you.
73,
Tim, KB0VRV

Date: Thu, 13 Nov 1997 20:22:24 -0500
From: Tim Cook <timcook@erinet.com>
To: QRPL <qrp-1@Lehigh.EDU>
Subject: [30719] Key Info
Message-ID: <346BA7CF.B2D75AC8@erinet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Just got an old dual paddle key that I would like some information on.
It is about the size of a Bencher, and has a grey heavy cast base with
lighter grey paddles. It has "AUTRONIC" cast into the top of the base
and on the bottom has "Electrophysics Corporation, Newport Beach Calif"
cast in it. I would like to know more about it such as when it was made

etc. Seems to be very well made with 5 chrome adjustment screws. Thanks in advance

Tim
NZ8J

Date: Thu, 13 Nov 1997 20:29:42 -0500
From: "Kenneth W. Evans" <w4du@bellsouth.net>
To: qrp-l@Lehigh.EDU
Subject: [30720] QRP ARCI Board Elections
Message-ID: <346BA986.B1E716F4@bellsouth.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

QRP ARCI BOARD ELECTION RESULTS

As announced in both the July and October 1997 issues of the QRP Quarterly, the terms of three members of the Board of Directors of the QRP ARCI are expiring on April 1, 1998. Those whose terms are ending are Cam Bailey, KT3A; Bob Gobrlick, N0EB; and Hank Kohl, K8DD. Members interested in standing for election to these offices were asked to send me their self-nomination and biographic data by October 31, 1997. As of that date, I have received data from the three incumbents! Since the deadline is well past, they are "running unopposed". Therefore, a formal election is not needed nor is it necessary for ballots to be printed in the January, 1998 Quarterly.

Congratulations to all three and thank you for your willingness to serve.

Ken Evans
W4DU
Secretary/Treasurer QRP ARCI

Date: Thu, 13 Nov 1997 21:35:05 -0400
From: Dave Marling <dbm@klis.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>, Jeff Lawson <lawson@vnet.ibm.com>, Dan Janda <janda@epix.net>, Paul Forgrave <forgrave@patent-law-attorney.com>, Don MacRitchie

<panhead@nbnet.nb.ca>, David & Elaine Smith <wq1h@gsinet.net>,
Subject: [30719] QTH centered maps
Message-ID: <346BAAC8.EC6CB778@klis.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

For those of you who might be interested in generating maps centered on
your qth check out:

<http://www.arscorp.com:1080/>

choose the "short form" and fill in the form with the required info or
use the "long form" for more detail.

73,
Dave
VE!VQ

Date: Thu, 13 Nov 1997 18:53:15 -0600
From: "Phil, K6LS" <k6ls@amsat.org>
To: qrp-1@Lehigh.EDU
Subject: [30719] re: 73 magazine
Message-ID: <346BA0FB.FBADEA1C@amsat.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Having just got the latest copy in the mail today,
I must point out one good point...
Inside the back cover (last page (p88)) there is
one of the funniest Robert Beasley, K6BJH cartoons
I've laid eyes upon.

Picture two guy's standing on Mars (in space suits) with
the Mars mission base station in the background. One
is saying to the other: "I think I'll go get on the band,
call 'CQ Earth', and see if I can create the biggest pile-up
in the history of amateur radio."

And for qrp content the mag. this month has articles on
the NW40, microwave QRP rigs and the usual qrp

column, and lets not forget a couple on antennae.

--

73 de Phil, K6LS

k6ls@qsl.net <or> k6ls@amsat.org
http://www.qsl.net/k6ls
DM79or, Arapahoe County, Colorado
ITU zone 7, CQ zone 4
QRP-L #612 NorCal #824
CQC #471 ARCI #8866

Date: Thu, 13 Nov 1997 20:59:25 EST
From: ka7you@juno.com
To: kl7ixi@mailcity.com
Cc: qrp-l@Lehigh.EDU
Subject: [30719] Re: QRPp mailing
Message-ID: <19971113.181230.16719.4.KA7YOU@juno.com>

Mike,

The KL7 call probably confused the postman, and sent it to a frozen
outpost first!

Better luck with the next issue.

7 3,

Rod Johnson KA7YOU from CN97ak near Issaquah, Wa. 160M thru 1296 MHz
(3456MHz still in the wings)

Date: Thu, 13 Nov 1997 21:00:08 -0500 (EST)
From: ARDUJENSKI@aol.com
To: qrp-l@Lehigh.EDU
Subject: [30720] ANTENNA BASICS
Message-ID: <971113204724_1271081885@mrin84.mail.aol.com>

All your input has been great on the coax issue. Which now leads to:

QUESTION 1: Then comes the question is it better to have a higher mismatch
between feeder and antenna or a slightly higher dB line loss but close
match?????

For example, take a 40m dipole. The antenna load may be about 40-60 ohms.

Would you get better performance from feeding it with 50 ohm coax with a loss of 1.1 dB or would feeding the same antenna with open feed which has a rating of about 600 ohms but a dB loss of only about 0.4 or less????

QUESTION 2: Does the feedline mismatch only come into play when not operating at the resonant frequency?

Alan KB7MBI

Date: Thu, 13 Nov 1997 20:01:55 -0600
From: "Phil, K6LS" <k6ls@amsat.org>
To: qrp-l@Lehigh.EDU
Subject: [30719] ahh..memories or, what got me started in qrp.
Message-ID: <346BB113.8B3F4A20@amsat.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Was within 2 miles of the local HRO today and I guess that my car took over and next thing ya know I was there! while there, I picked up a couple of books, one being the ARRL "QRP POWER", which is basicly a whole mess of recent reprints from QST, QEX and the Hand Book. Lots of good articles. I ran across the one article that was the motivating factor in my intrest in QRP. That would be the "Oner" (Oct '94 p64 QST) the little transmitter that was mounted on the inside of a 35mm film box! credit to WA3ULH. Having been a ham for almost 4 months, I was facinated by the size and the fact that he worked New Zealand (~8,000 mi), and it was something even I could build, from then on, I was hooked.. I think after all the recent accumulation of projects are completed, I will put one or two of these (Oner) together.

And, speaking of projects, My order from HB electronics, the 22 2n2222's for 1 buck came in today! oh joy!

--
73 de Phil, K6LS

k6ls@qsl.net <or> k6ls@amsat.org
<http://www.qsl.net/k6ls>
DM79or, Arapahoe County, Colorado
ITU zone 7, CQ zone 4
QRP-L #612 NorCal #824
CQC #471 ARCI #8866

Date: Thu, 13 Nov 1997 22:20:20 -0500 (EST)
From: Mike Czuhajewski <wa8mcq@u1.abs.net>
To: qrp forum <qrp-l@Lehigh.EDU>
Subject: [30720] Incorrect power formula in QRPP article
Message-ID: <Pine.BSI.3.96.971113221719.846A-100000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
Content-Transfer-Encoding: QUOTED-PRINTABLE

There's an interesting article in the latest issue of QRPP by Frank=20
Brumbaugh, W4LJD, on a power measurement device with a dummy=20
load and diode detector built onto two PL-259 plugs, which are=20
plugged onto a UHF tee adapter, in turn plugged onto the output of a=20
QRP rig. If you get QRPP, you'll also see this same article (but with=20
different drawings, and without pictures) in the next issue of the QRP=20
Quarterly, in my Idea Exchange column. For some reason Frank sent=20
it to both publications simultaneously without telling either of us--
something that is generally frowned on in the publishing world. I was=20
going to drop it completely after I saw it in QRPP, but since I had so=20
much time invested in the drawings I made for it I'll run it anyhow :-)=20
Can't really blame him TOO much, since I run some of his inputs=20
immediately and others don't get used for months...or years, in some=20
cases! Maybe he was just trying to make sure that it got published=20
within his lifetime :-)) (He retired many years ago.)

As soon as I got the item from him a month or so ago, I fired off a=20
letter immediately pointing out an error in the power formula he used.=20
Unfortunately, the QRPP article has exactly the same error as the one=20
he sent me, and it will give incorrect results if used as shown. Since I=
=20
didn't know it was going to be in QRPP until I saw it in print I couldn't=
=20
warn Doug about the error, but the one coming up in the QRP=20
Quarterly will have the correct formula.

The formula for calculating power is given twice in the text on page=20
13 and also shown in Figure 2 on page 15. On page 13 it starts out=20
correctly by stating the power is calculated by multiplying the peak=20
voltage (which the meter shows when using this device) by 0.707 to=20
get RMS, squaring that and then dividing the result by the=20
resistance=9750, in this case. That's correct so far. But for some reason=

=20

he then said to take the square root of that quantity, which gives an=20 incorrect result. The same error is in the formula on page 15, where a=20 radical (square root sign) is shown. To get correct results, do not take=20 the square root. (The text on page 16 gives an example of 22.36 volts=20 being shown on the meter at the 5 watt level; those are correct figures.)

Power (in watts) is calculated by squaring the voltage in a DC circuit,=20 or the RMS voltage in an AC circuit, and dividing by the resistance in=20 ohms. If the voltage measured is peak, which is what is seen at the=20 output of a diode detector like his circuit, you must first multiply the=20 peak voltage by 0.707 to convert it to RMS, then square that, and=20 divide by resistance. =20

There's a handy shortcut which I like to use that simplifies things a bit=20

and eliminates the divide-by-resistance step, but it only works with a=20 resistance of 50 ohms. Take the peak voltage--do not convert it to=20 RMS--and square that, then divide that by 100, mentally shifting the=20 decimal point over two places. For instance, that 22.36 volts becomes=20 499.9696, and shifting the decimal place two positions gives 4.999=20 watts. (If you do it the other way, it comes out to 4.998, an=20 insignificant difference.)

The reason this works--squaring the quantity ($E_{\text{peak}} \times 0.707$) results=20 in the quantity ($E_{\text{peak}} \times E_{\text{peak}} \times 0.707 \times 0.707$), or $E_{\text{peak}} \times E_{\text{peak}}=20 \times 1/2$. Multiply that by 2 and you get E_{peak}^2 -squared; multiplying the=20 bottom of the formula by 2 to keep things equal turns the 50 into 100,=20 so you end up with power in watts equal to E_{peak}^2 -squared divided by=20 100. Note that this shortcut only works with 50 ohms.

Another thing to remember is that if you're measuring power with an oscilloscope, the waveform shows peak to peak voltage; you must divide that value by 2 to get peak voltage before plugging it into the formulas.

73 and Queue Our Pea DE WA8MCQ

wa8mcq@abs.net

Date: Thu, 13 Nov 1997 20:20:46 -0700 (MST)

From: ki7mn@dancris.com

To: qrp-1@Lehigh.EDU, azqrp@dancris.com

Subject: [30721] I'm the Novice/Tech fox on Sunday night

Message-ID: <199711140320.UAA18768@dancris.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Tim, KB0VRV wrote,

>Hello. My name is Tim, and I am going to be the next Novice/Tech fox.
>I will be near 7.122 on Sunday night at 7:00 CST (Nov 17 0100-0300 UTC).
>I will be using the simple exchange of RST, Name and State.
>I will use RIT offset if necessary.
>
>I am 12 years old. I live in St. Paul Minnesota.
>I got my tech license when I was 10, and my tech plus license when I was
>11. I passed my written General exam in April, and now am practicing code
>to get my speed up to 13. I hope this fox hunt will help. My speed is now
>about 8 to 10.
>
>My dad, Craig (AA0ZZ), will be logging for me, but he wants me to do all
>the rest myself.
>
>Hope to hear from you.
>

Guys and gals, we need to make an effort to welcome Tim to the list and to ham radio. The Monday nite N/T didn't fare too well, so let's all get out and give them contacts. (or at least try :^))

72,73

Bob KI7MN Norcal 1228, QRP-L 271, ARCI 8918, CQC 274, AKQRP 30
<http://www.dancris.com/~ki7mn>

Date: Thu, 13 Nov 1997 19:30:14 -0800 (PST)
From: Monte Stark <ku7y@sage.dri.edu>
To: Johnson <johns516@maroon.tc.umn.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [30722] Re: I'm the Novice/Tech fox on Sunday night
Message-ID: <Pine.SUN.3.90.971113192811.11022C-100000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Tim,

Welcome and congratulations. You are almost there!

I'll polish up the allumnium and be there!! Just be carefull of those guys from AZ.....they might give you bad habits..... :-)

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada.....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Thu, 13 Nov 1997 21:44:34 -0800
From: "CHRIS" <guardian@mvtel.net>
To: <qrp-l@Lehigh.EDU>, <timcook@erinet.com>
Subject: [30723] Re: Key Info
Message-ID: <01bcf0c0\$62ff0b00\$278511cf@default>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

http://fohnix.metronet.com/~nmcewen/key_id.html

try this site for key identification
chris

Date: Thu, 13 Nov 1997 22:44:08 EST
From: sigcom@juno.com (Stephen M Smith)
To: qrp-l@Lehigh.EDU
Subject: [30724] More 4013
Message-ID: <19971113.194716.8183.1.sigcom@juno.com>

Group,

Well, the folks at E.F. Johnson were kind enough to FAX me a copy of the substitution chart that they used to print. I'd be willing to bet that the 4013 that Dan sells is the 576-0004-013. It makes sense that this part has the RCA logo on it as EFJ never built transistors that I'm aware of. While the information is skimpy, Johnson says the following about this part:

Description: Silicon NPN RF power transistor
"Rated Frequency": 135 mHz (this is apparently -not- Ft)
VCE0: 40 V

P0ut: 3.4 Watts
PDis.: 5 Watts

That 's all the dope. Sounds like an OK final for QRP. Now, back to the 2222 project (just got my care package from HB today!).

'2s.....Steve, WB6TNL

Date: Thu, 13 Nov 1997 14:10:00 -0500
From: "Bob Kellogg" <ae4ic@nr.infi.net>
To: <cyee@bidmc.harvard.edu>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [30725] Merits of Crazy Glue - AUTEK RF-1
Message-ID: <199711140401.XAA14966@mailhost.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Oh, come on, Guys! If you are Crazy glue impaired, read on. (I didn't say repaired)

You don't believe the hard hat to the beam ad? For shame! I use crazy glue all of the time.

Most recently, when I had the problem with the Autec RF-1 turning itself on when bumped and running the battery down. I keep mine in a little pouch, and after replacing two batteries, here's what I did:

Cut a 1/8" piece of plastic into a little strip 1/8" wide and about 1/2" long. 1/8" X 1/8" X 1/2", get it? Then made another just like it. Used Crazy glue to glue these two pieces on either side of the protruding on/off switch. Now, it's easy to turn the RF-1 on and off with my finger, but casual bumping doesn't touch the switch. The glue line is invisible.

These instant glues come in at least 3 thicknesses. The thinnest requires a good fit to make a solid glue joint. (this would probably work with the paddles) The medium grade fills very slight cracks and imperfections. (this would surely work if the thin didn't) The thick stuff is for really crummy joints, and if your joint is that poor, I'd use epoxy instead.

If I use it to glue the magnet in my paddles, I'll position it very carefully, then put a drop of the glue on the crack between the magnet and the brass. Don't plan on repositioning the magnet, because it will be there to stay? (actually, I think heat will weaken the bond enough to

break it loose if you have to)

CUL,
Bob Kellogg, AE4IC, Greensboro, NC
Prolably, but not nececelery. -- Benny Hill

Date: Thu, 13 Nov 1997 21:26:07 -0700
From: flydnq7x@primenet.com (Floyd Smithberg)
To: qrp-l@Lehigh.EDU
Subject: [30725] KB0VRV Young&Old Foxes
Message-ID: <199711140425.VAA23047@usr01.primenet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi John KB0VRV, missed your original post but picked it from KI7MN and KU7Y.
I already
had you on my calendar for sunday night, so will be looking for you after SS.
Maybe we can set a new record for the youngest Fox and the oldest Fox
hunter....since
you're just 12 and I just passed 79 in September....a 67 year
difference...wow do I
feel old now :-(I started around your age too....so hope you have as many
happy ham
years as I've had...and still going and going and going.....
73 Floyd NQ7X Phoenix ScQRPion DM33uq QRP-L 343
ARRL ARCI G-QRP NORCAL DX WRKD HF=324 SAT=101 QRP=103

Date: Thu, 13 Nov 1997 22:42:03 -0800
From: Mike Stapp <stapp001@gold.tc.umn.edu>
To: qrp-l@Lehigh.EDU
Subject: [30726] RE: KB0VRV, N/T FOX for 11/17
Message-ID: <346BF2BB.12E6@gold.tc.umn.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Tim,
Looking forward to working you on Sunday.
Listen for your next door neighbor in Minneapolis!
Good luck and 73,

Mike - KE0WW

Date: Fri, 14 Nov 1997 04:59:07 -5
From: "Bill Kelsey - N8ET - Kanga US" <kanga@mail.bright.net>
To: qrp-1@lehigh.edu
Subject: [30726] Another 2222 book Special Offer
Message-ID: <199711140502.AAA17722@sparticus.bright.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Actually - two books this time.

The special sale of the GQRP Club Circuit Handbook was a success - there are still a few left at \$12 each if anyone missed it the first time around.

The two books I am going to do this time are:

The Electronic Data Book for Homebrewers and QRPers by Paul Harden - NA5N

QRP Power published by the ARRL.

I expect that most of the subscribers to QRPL already have NA5N's book - if not - now is your chance. It is a super reference for all kinds of info you need to build homebrew gear. It even has a circuit or two with 2N2222's in it, but it's biggest plus is all the info it has about the OTHER parts you will need to use in the 2222 rig - resistors, capacitors, toroids (!) diodes, etc. The cost is \$20, and I will cover the shipping.

QRP Power is a book that was published in 1996, and was compiled by N1BKE and KH6CP/1 (now W1VT). I was scanning it the other night for ideas for the 2222 rig, and found an article in it by Roger Hayward KA7EXM entitled "The Ugly Weekender II - Adding a Junk-Box Receiver" It is built using ONLY 2N2222 transistors (11 of 'em!) and a diode double balanced mixer! It also has a good series of 4 articles on homebrewing, an article on the 40-40, a lot of stuff by KK7B, and articles on crystal ladder filter design and double tuned circuits.

I do not have QRP Power in stock - so I will take orders for a week and then order from ARRL. If I can get 20-25 e-mail orders in the

next day or so, I will get an order to ARRL sooner and might be able to ship by Thanksgiving....

As with the other specials, I will cover the shipping cost and sell the book at \$12.

If you buy BOTH books, the cost will be even better at \$30, and I cover the shipping.

All orders will be shipped Priority Mail.

If anyone overseas is interested - let me know and I will check on shipping costs and work out a price that will cover my cost.

I can take checks, money orders, and VISA/Mastercard.
Let me know via e-mail that you are mailing an order so I can get stocked up. You can also leave a msg at 419-423-4604 anytime.

Mail orders to:
Bill Kelsey - N8ET
Kanga US
3521 Spring Lake Dr.
Findlay, OH 45840

If there is an interest in a group by of any of the other ARRL publications - let me know - perhaps we can work something out.

Hope to hear from a lot of you!

73 - Bill - N8ET
Kanga US
kanga@mail.bright.net
<http://www.bright.net/~kanga/>
419-423-4604

Date: Thu, 13 Nov 1997 21:17:15 -0800
From: Monte Stark <ku7y@sage.dri.edu>
To: mikec@primenet.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [30727] Re: Comdex
Message-ID: <346BDEDB.5B4B@sage.dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Michael Connor wrote:

>
> > >
> > Yea, he has to make reservations at the strip,er, dinner club.

*****snip*****

>
> Funny; I don't know where any of those places are, but
> I can drive you right to AES.....
>
> Of course, you could probably call Monte Ron up in Reno;
> Them Nevada boys prolly know all about that stuff.:-)
>

Well Mike,

I have been to all of them in Mound House....but only as an EMT!
Quite often we had to run over to one of them and jump start some
poor customer!!

I still think that would have been a good place to operate radio
from....too bad that so many just can't trust themselves!! :-)

cul,

--

73, Ron

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP QRCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Thu, 13 Nov 1997 22:21:32 +0000
From: Roger Hightower <n7kt@dancris.com>
To: ae4ic@nr.infi.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [30728] Re: Merits of Crazy Glue - AUTEK RF-1
Message-ID: <346B7D6C.87A8218@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bob is right.....IF you buy the right stuff. Don't pick it up at the
drugstore or the supermarket, or even the hardware store. Go to a Hobby

Shop and ask for Zap, Jet, or Hot Stuff if you want the thin. SuperJet is the thicker mix, and you can pick up a bottle of accelerator, too, if you want the stuff to set up quickly.

Dust on a light coat of baking soda to make a fillet, and you can flow the thin stuff onto that for an almost indestructible joint. Good for project boxes, shields, etc. I've used these adhesives in 1/4 scale radio-controlled airplanes and never had a joint fail in flight.

Great stuff to have around, and if you seal the bottle well and keep it in the refrigerator it will last longer. Just let it warm to room temp before use. You might get a bottle of Debonder, too, to unstick those fingers.

--

72/73, de Roger, N7KT
AK-QRP 167, ARCI 8946, CQC 176, GQRP 9081, NE-QRP 383, NORCAL 1099,
QRP-L 62

Date: Fri, 14 Nov 1997 01:13:11 -0500 (EST)
From: ARDUJENSKI@aol.com
To: qrp-l@Lehigh.EDU
Subject: [30728] ACCORDING TO HOYLE...
Message-ID: <971114011310_-1006074081@mrin51.mail.aol.com>

According to Hoyle...or whoever wrote the book I was reading there was an interesting section on checking the efficiency of the feedline by shorting out the far end and applying a small amount of power and check the SWR. The higher the SWR the more efficient according to the log-log graph.

It looked interesting and I was wondering if many of you have tried this test? The book is SIMPLE LOW COST WIRE ANTENNAS by ORR on page 174.

Alan KB7MBI

Date: Fri, 14 Nov 1997 00:32:22 -0600 (CST)
From: Adrian Weiss <aweiss@sunflowr.usd.edu>
To: QRP-L@listserv.lehigh.edu
Subject: [30729] Bulgaria/LZ1BB Reading Materials Needed
Message-ID: <Pine.SOL.3.94.971114001212.1144I-100000@sundance>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Gang:

I thought that I might help out a good cause by excerpting recent e-mail among several parties here and Harry Popov, LZ1BB, who publishes the QRP-Digest (QRP-D) via e-mail to over 800 subscribers. Harry contacted me about advertising JOY OF QRP in the QRP-D and I did so with a review and price list. After corresponding with Harry a couple of times, during which he shared with me the story of getting into QRP by reading my columns in CQ way back when, I was curious about the part in which he told about where he read those QRP columns in CQ -- during work-trips to Sofia where the only ham radio club existed in those days. It was the only source of foreign ham radio reading material in the country! It took me a while to actually understand that -- no ham radio reading material???? Over here, there is so much that guys just can't carry subscriptions to all there is and read even a part of it!

So, I shipped off a half-dozen JOYS and HISTORY -- more than needed to cover the cost of advertising in QRP-D -- with the hope that Harry and many of his friends will have a chance to read about QRP. Most of us who are into QRP DX don't shy away from working an LZ, do we? The greater the number of LZ's who operate QRP, the better chance for two-way QRP QSO, right?

I'm sure all of us have some "spare" reading material that includes QRP stuff. I tossed out a bunch of CQ's a couple of years ago myself -- after reading about the situation over there, I wish I still had them laying around to box up and send to Bulgaria. At any rate, maybe a couple of you out there have some QRP stuff you'd consider mailing. Surface mail is rather cheap -- the JOY's HISTORY's and Milliwatts only cost around \$7.00. So, what say guys?

Part of Harry's recent e-mail is reproduced below.

>

>Let make the things clear. In Bulgaria there is no Ham related
>magazine. This makes any effort to organize QRP or whats ever
>club almost impossible. LZ QRP Club is not existing. We have
>BULGARIAN QRP GROUP.

>

>IMO we cant call club a small group of enthusiasts who even don't
>have magazine or bulletin in written form. Interesting point is how
>should you read our magazine when we have one. Do you know that we
>write in different alphabet than you and in Bulgarian language.

>

>B QRP Group was created several years ago to help those interesting

>from QRP in Bulgaria. It is unformal group. I am very lucky to be G
>QRP Club member since 10 years. I am member thanks to sponsors from
>the club. In communistic time it wasn't possible to send money
>abroad, now it is very expencive. It costs aprox 8 times more to
>pay money transfer than to pay the G QRP C membership.

>

>That is the reason we all are very thankful to my sponsors. Each
>copy of SPRAT is read by many, and I mean *many* LZ Hams. We say
>thanks to all who help us to keep in touch with QRP World.

>

>The QRP Digest is in no way representing Bulgarian QRP Group nor is
>its edittion. QRP-D is property of Internet Business Center Ltd.
>Perhaps I must not explain that it is not cheap effort and some one
>have to pay. QRP-D is open for commercial advertisement. For now we
>donate all income to LZ0A to help their expedition in Antarctica.
>Later any income will be used to cover the Digest expences.

>

>Once a man asked another one: What are you doing? Nothing - he
>replied - because no one could say I am doing it in a wrong way!

>In any case I'll continue to
>help Bulgarian boys with all kind of materials, parts and equipment
>I would be able to collect. And thanks to those who help me in this
>effort.

>

>There were 16 out of 850+ subscribers who didn't like QRP-D.

>

>Regards,

>Harry Popov LZ1BB

So, there you have the story. I'd like to see the LZ QRP guys get a lot of
reading material. Sounds like they could use parts as well. Use your
imagination! Contribute to the QRP-D (although I haven't, I intend to once
I get time. Here's the QTH stuff:

Harry Popov
PO BOX 87
Sofia 1618
Bulgaria

e-mail to:

ibc@omega.bg

72/73 Ade W0RSP

Date: Thu, 13 Nov 1997 23:41:20 -0700
From: wa5whn@juno.com
To: qrp-1@Lehigh.EDU
Subject: [30730] QRPttf 98 Theme
Message-ID: <19971113.234128.3198.2.wa5whn@juno.com>

qrp-1ers,

A few points of clarification here, ie: If WA5WHN operates on the USGS survey marker @ the Four Corners monument, the ARRL will not recognize this marker as 4 States, towards the QRP WAS award. So, in order to satisfy the ARRL requirements, I would have to pull the station a few feet back into each individual State, then send the exchange, 4 times, from 4 different locations. That should clarify my comment about the ARRL not recognizing us if we straddle the USGS 4 corners marker, and operate during the QRPttf '98. However, we will have enough People, up at 4 Corners, such that KI7MN may operate in Az., N7KT may operate in Utah, AB7TT may operate from Colorado, and NA5N from NM, during the QRPttf '98 event. Each station will be up near the 4 corners marker, but will be operating from well inside the appropriate state boundaries. The boundaries all have USGS markers. The SES (Special_Event_Station) will be a different story & that will NOT occur during the NorCal QRPttf '98 time period. Don't confuse those 2 operations. The SES callsign is N4C. BTW, KI7MN may decide to operate in NM, NA5N in Colorado, N7KT in Utah, and WA5WHN in Az., all using their own callsigns, as per the QRPttf rules.

As stated before by several People, it's not just State Borders. Don't forget private property boundaries, county boundaries, City Boundaries, etc.. It just so happens that we had chosen the 4 Corners area. The 4 Corners is a famous border because it's a point where 4 State boundaries meet @ one USGS marker.

The humor had kicked in when K5FO had mentioned we could work all States, because 1 Person could set up a station straddling the 4 corners USGS marker, and You could pick up one contact with 4 states ;-) ;-)
{Humor}

Key point: The Theme is not just State Boundaries, as was stated a multitude of times, in previous notes (check the archives).

Wahoo !! Tnx Mr. Torrell, band conditions for the Thanksgiving weekend should be superb, at least from maidenhead grid square DM65.

72,...Jay WA5WHN DM65qd Albuquerque, NM

USA

Date: Fri, 14 Nov 1997 05:32 CST
From: FAITHD@dnr.state.wi.us (Don C. Faith III, AM/7, \((608\) 267-3135)
To: qrp-1@lehigh.edu
Cc: k5zty@juno.com
Subject: [30731] Re: Z Match tuner schematic ?
Message-ID: <009BD447289E3040.9202@dnr.state.wi.us>

There is a good Z-match discussion and a z-match schematic at

<http://www.pconline.com/~rohrwerk/k0jd/z-match.html>

This is an e-mail post that Charlie Lofgren (W6JJZ) has been putting out regarding the z-match tuner. Charlie also has an article (and schematic) regarding the z-match tuner in the most recent ARRL Antenna Compendium (V?).

The other slightly different z-match design is published in William Orr (W6SAI)'s book; HF Antenna Handbook. This design is basically the same version used by Roy Gregson (W6EMT) for his Z-match kit (ZM-1). I believe Roy may be coming out w/ a new version of the kit (ZM-2?) as he has found a new supplier for the needed poly caps.

Hope that helps.

73 (es 72) de N9WR, Don C. Faith III

Date: Fri, 14 Nov 1997 06:40:25 EST
From: k5zty@juno.com
To: SSLYON@worldnet.att.net
Cc: qrp-1@Lehigh.EDU
Subject: [30732] Re: Molasses Cookie Archeology. (definitely QRP research)
Message-ID: <19971114.113524.5463.6.k5zty@juno.com>

I think Seab has been spending too much time with Nils

Bill, K5ZTY

Date: Fri, 14 Nov 1997 06:40:25 EST
From: k5zty@juno.com
To: qrp-1@Lehigh.EDU
Subject: [30733] re: For Sale (HW-7)
Message-ID: <19971114.113524.5463.3.k5zty@juno.com>

The HW-7 package is sold. If the deal folls through, I'll contact the next in line.

Bill, K5ZTY

Date: Fri, 14 Nov 1997 06:40:25 EST
From: k5zty@juno.com
To: qrp-1@lehigh.edu
Subject: [30734] re: Z-Match tuner schematic
Message-ID: <19971114.113524.5463.4.k5zty@juno.com>

Thanks for the many replys that I recieved to my inquiry about the Z-Match. This list is better than a library when it comes to getting information.

BTW, one person said that Emtech is not selling the ZM-1 any more because the poly caps were no longer available. Anyone else heard this??

Thanks again and 72

Bill, K5ZTY

Houston, TX

k5zty@juno.com

Date: Fri, 14 Nov 1997 08:39:21 -0500 (EST)
From: William McFadden <wmcfadde@oucsace.cs.ohiou.edu>
To: qrp-1@lehigh.edu (qrp-1)
Cc: wa5whn@juno.com
Subject: [30735] Re: QRPttf 98 Theme
Message-ID: <199711141339.IAA06405@oucsace.cs.ohiou.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

Jay and the list,

In a post to the list, Jay said

> A few points of clarification here, ie: If WA5WHN operates on the USGS
> survey marker @ the Four Corners monument, the ARRL will not recognize
> this marker as 4 States, towards the QRP WAS award. So, in order to
> satisfy the ARRL requirements, I would have to pull the station a few
> feet back into each individual State, then send the exchange, 4 times,
> from 4 different locations. That should clarify my comment about the ARRL
> not recognizing us if we straddle the USGS 4 corners marker, and operate
> during the QRPttF '98. However, we will have enough People, up at 4
> Corners, such that KI7MN may operate in Az., N7KT may operate in Utah,
> AB7TT may operate from Colorado, and NA5N from NM, during the QRPttf '98
> event. Each station will be up near the 4 corners marker, but will be
> operating from well inside the appropriate state boundaries. The
> boundaries all have USGS markers. The SES (Special_Event_Station) will be
> a different story & that will NOT occur during the NorCal QRPttf '98 time
> period. Don't confuse those 2 operations. The SES callsign is N4C. BTW,
> KI7MN may decide to operate in NM, NA5N in Colorado, N7KT in Utah, and
> WA5WHN in Az., all using their own callsigns, as per the QRPttF rules.

This sounds like the ideal solution. The theme is met, QRPers have the chance to work many states, and the QSOs can be applied toward WAS. In addition, this scheme--having different callsigns in each state--removes any confusion about whether the QSO can be applied to WAS.

The Southeast Ohio Radio Adventure Team might consider doing such an operation at the OH/WV border. Of course, this might mean that the stations will be separated by the Ohio River :-)

> As stated before by several People, it's not just State Borders. Don't
> forget private property boundaries, county boundaries, City Boundaries,
> etc.. It just so happens that we had chosen the 4 Corners area. The 4
> Corners is a famous border because it's a point where 4 State boundaries
> meet @ one USGS marker.

That the theme is not just state borders has been stated only in emails to QRP-L. However, the official announcement on the NorCal web page states that we are encouraged to operate from state borders for the purposes of handing out WAS-applicable QSOs. I quote from the page: "The idea is that we want to encourage everyone to operate from a state border, or even where 3 or 4 states come together." It then states "In order to have the qso qualify for ARRL WAS consideration, reports will have to be sent from each state of operation. If you work a station on the Kansas/Nebraska border, the station would send you a report from each state, i.e. 579 KS, 579 NE."

I suggest that this announcement be changed to reflect that all types of borders and boundaries are to be considered for station locations, and that it be changed to encourage separate stations in each state at a state border.

My concerns notwithstanding, I think QRPttF 98 will be a very fun event, and I am looking forward to it with great eagerness. I applaud NorCal for organizing this fine event--it's one of my favorite events.

72,

Eric

--

W. Eric McFadden WD8RIF Athens OH
wd8rif@qsl.net
<http://www.qsl.net/wd8rif>

Date: Fri, 14 Nov 1997 08:57:42 -0500 (EST)
From: AlK0FRP@aol.com
To: QRP-L@Lehigh.EDU
Subject: [30736] Border Operations
Message-ID: <971114085742_-1668418812@mrin39>

Sorry have not been reading all the QRP TTF messages but I used to run Barnes county North Dakota and Brown county South Dakotas as a kid and would park the car on a approach off the road on the ND/SD border, running my FT-101 mobile. For the county hunters both states and counties were good. I know of a place where I could set up on the border of Wy and CO totally off the road and in a tree area. The border is marked with a wood sign nailed to a tree. So sorry for the repeat but what is this 100m thing ?????
I guess a station can't be in, two of even three or in the case of four corners Co, NM, AZ and UT , states at once ?????
Depending on my schedual (road travel) I would like to do the CO/ WY thing
.

Al K0FRP

Date: Fri, 14 Nov 1997 07:30:22 MST
From: kv7g@juno.com
To: n7kt@dancris.com
Cc: qrp-l@lehigh.edu
Subject: [30737] Re: Merits of Crazy Glue - AUTEK RF-1
Message-ID: <19971114.073207.3894.0.kv7g@juno.com>

My 2 cents

These Super Type glues are NOT waterproof, if your fingers get stuck, just soak them in warm water.

I used to make 'O' rings in the field for pumps etc, after cutting to size and gluing I had to coat the joint with a water proofing solution. You will also not have much success in permanently gluing glass as glass is liquid. The Loctite Corp puts out a nice chart that covers all of their products and their uses, large hardware suppliers usually have them.

Bud - KV7G

On Thu, 13 Nov 1997 22:21:32 +0000 Roger Hightower <n7kt@dancris.com> writes:

>Great stuff to have around, and if you seal the bottle well and keep
>it
>in the refrigerator it will last longer. Just let it warm to room
>temp
>before use. You might get a bottle of Debonder, too, to unstick those
>fingers.

>

>--

>72/73, de Roger, N7KT

>AK-QRP 167, ARCI 8946, CQC 176, GQRP 9081, NE-QRP 383, NORCAL 1099,

>QRP-L 62

>

>

>

>

Date: Fri, 14 Nov 1997 09:41:52 -0500

From: "Thomas J.McCuen" <TMcCuen@compuserve.com>

To: QRP-L <qrp-l@Lehigh.EDU>

Subject: [30738] SGC 2020

Message-ID: <199711140942_MC2-282C-6096@compuserve.com>

MIME-Version: 1.0

Content-Transfer-Encoding: quoted-printable

Content-Type: text/plain; charset=ISO-8859-1

Content-Disposition: inline

Re: Index Labs ad

>I was just looking over the October 1997 issue of 73 and on page 57 is a=

n
>ad for Index Labs. "The New QRP Plus, completely re-engineered ...".

>Didn't Index Labs go out of business this summer, sell everything to SGC=

>and no longer support the QRP Plus?

Thought so.... That's why myself and many others are waiting for the SGC
2020 to come out (promised in Sept) . He(index labs) was assisting with=

this unit.

Side Note;

Spoke yesterday to SGC company.... Looks like release date is now in
JANUARY !! Spokeperson stated that there were SOFTWARE problems tho the
hardware is done... Stated she has seen a working unit ... No other info
other than chk the Net site for shipping sched Chkd site; shipping
sched and finial specs are to be posted prior to Nov 30.

Hope the wait is worth it.

Tom aa2vk

Date: Fri, 14 Nov 1997 09:50:23 -0500 (EST)
From: Philip Karras 827-2956 <PXX4@CDRH.FDA.GOV>
To: qrp-1@Lehigh.EDU
Subject: [30739] LED flashlight, homebrew
Message-ID: <C23ZXCPE2ADN*/R=FDADR/R=A1/U=PXX4/@MHS>
MIME-version: 1.0
Content-type: TEXT/PLAIN; CHARSET=US-ASCII

Well, I saw one of these mini-ultrabright LED flashlights, Jim K4CGY
had two of them. I decided to order about 10 LED's (not the
flashlights) Found a place in Nuts & Volts selling them for 10/\$5,
but shipping/handling was also \$5. Upped the quatity to 40 so I paid
about \$0.63/LED.

I had this very small white-light rechargable flashlight from about 10
years ago. Still going strong except it fell out of my pocket once
too often. I broke completely apart & I lost the lightbulb. (Here's
wehre being a packrat comes in handy.)

2-NiCds at about 2.6 volts charged hmmm, I used a 10cent LED first &

it worked fine, cut the ultrabright leads to fit, soldered onto one connector, bent the other just so, slapped it back together & it worked! Glued the case using solvent, drilled out the cover to it would fit over the longer LED & WA LA, a homebrew LED flashlight (well, at least it's a home-modified flashlight :)

Now, how am I going to use the rest of these puppies? This is going to be fun!

By the way, the LED I used had a lens on its end (normal) what was not normal was that there was no image of the LED junction, it's almost as if it has a 10% diffuser built in, but I don't see one. While the beam stays pretty tight, there is a round, almost evenly illuminated spot, it's a bit dimmer in the center, also normal. I have not checked the other 39, perhaps this one was a fluke?

Source: ALL Electronics Corp Orders: 800-826-5432
818-904-0524 - information line
Order placed: 11/03/97
arrived: 11/13/97 (UPS CA to MD)

Usual disclaimer, just a satisfied customer.

73 & 72 de KE3FL
Phil K

ke3fl@juno.com

Date: Fri, 14 Nov 1997 09:59:35 -0500 (EST)
From: PaulKB8N@aol.com
To: bobbach@cetlink.net, c-hawley@uiuc.edu, cebik@utkux.utcc.utk.edu,
towertalk@contesting.com, antennas@qth.net, qrp-1@Lehigh.EDU, gqrp-
1@blacksheep.org
Subject: [30740] Re: link tuners size disadvantage
Message-ID: <971114095934_-1910841086@mrin38>

In a message dated 97-11-13 09:37:15 EST, bobbach@cetlink.net writes:

<< L. B. Cebik wrote:
>
> > I have saved some 55 messages so far related to interest in the
> > re-emergence of a link-coupled tuner on the market--and I know some did
>

> I am looking forward to your tutorial.
>
> Chuck, KE9UW

>>

Link coupled tuners have but one disadvantage, size. Generally, large coils must be used. Also, enclosures must be fairly large. I wonder if anyone has tried fabricating a link-coupled coil assembly on a ferrite rod and with what results?

Paul, KB8N

Date: Fri, 14 Nov 1997 10:28:41 -0500
From: Zack Lau <zlau@arrl.org>
To: qrp-l@Lehigh.EDU
Subject: [30741] Re: ANTENNA BASICS
Message-ID: <346C6E29.5F7A@arrl.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The latest editions of the ARRL Antenna book and ARRL Handbook have DOS compatible software for analyzing specific cases.

Date: Fri, 14 Nov 1997 08:35:51 -0700
From: ji3m@maxwell.com (James R. Duffey)
To: qrp-l@Lehigh.EDU
Subject: [30742] Which Side of the Border is a Station Near the Border Located?
Message-ID: <v02130519b092150d8408@[192.31.66.158]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I am amused at the great concern shown in some of the posts to the net concerning which state credit will be given for WAS in operations from the "Run to the Border" QRPttf event. This is particularly funny given the mental state of some of us at the time the whole concept was cooked up at Ft. Tuthill last summer. I think Jay was sober. It is supposed to be a fun event and stimulate your creativity. It appears to have done that. I never would have thought of operating from a Taco Bell or a bookstore.

At any rate, Jay has spent countless hours trying to convince the ARRL to

give credit for WAS for states on both sides of the border worked with only one contact. (Jay is short for Jude, the patron Saint of lost causes :^)). They will not. He spent about 30 seconds getting Chuck to agree such contacts are acceptable for the ARCI WAS. The reader is encouraged to draw his own conclusions from these two data points.

Physics, great ruler of the universe and preserver of truth, justice, and the American way of life, tells us a station, does not radiate from a point, but actually actually originates portions of the signal in surrounding terrain far beyond where it is physically located. Although the antenna handbooks like to show nice pictures of electromagnetic waves (represented by straight line rays) being reflected from a point on the ground; that is a gross over simplification. The reflection actually occurs from a large area of the ground known as Fresnel zones. These zones can extend for many wavelengths around the antenna. For a dipole they are roughly elliptical, for a vertical they are circular. On the lower bands they probably extend from one side of the Ohio River to the other. :^) The ground actually "reflects" the electromagnetic wave by inducing currents in the ground which in turn reradiate the signal impinging on the ground. Ground with high conductivity does this well for a long distance; ground with poor conductivity does it poorly for a short distance. So part of the electromagnetic radiation from your station is coming from the ground many wavelengths away. In your neighbors yard, in the next county, in the next state; well you get the picture. It doesn't make much sense to be able to precisely locate a station on one side of the border or the other in these matters.

A station located near (a few wavelengths away or so) a border actually is radiating power from both sides of the border. Shouldn't somebody get credit for working both states in this case? Of course they should. Will they? ARCI-yes, ARRL-no. This is no big deal is it? There are lots of other QRP events during the year, with lots of chances to pick up QRP states. QRPers are a pretty accomodating bunch. Put out a call for a state you need on this list and somebody will usually try to activitate it.

This all seemed to make more sense when I first expounded upon it at Ft. Tuthill last summer. Didn't you take notes Joe? Run for the Border. -
Duffey KK6MC/5

James R. Duffey (505) 764-3143
Principal Scientist (505) 843-7995 (FAX)
Maxwell Technologies Inc/Albuquerque Division
Suite 300
2501 Yale Blvd SE
Albuquerque, NM 87106

Date: Fri, 14 Nov 1997 10:53:54 -0500
From: Zack Lau <zlau@arrl.org>
To: qrp-1@Lehigh.EDU
Subject: [30743] Re: Border Operations
Message-ID: <346C7412.4DDD@arrl.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The ARRL WAS rules don't go into detail about border operation, though it is stated that the stations contacted must be "land stations."

For the VUCC award, stations must be physically present in more than one square to give multiple square credit with a single contact, and recommends using markers or the work of a professional surveyor.

The September VHF contest allows only one multiplier per QSO--you need to move 100 meters and make another contact to give out a different multiplier.

Reading the rules is essential for anyone intending on competing or qualifying for an award--Zack W1VT

Date: Fri, 14 Nov 1997 08:56:44 -0700 (MST)
From: James P Rybak <jrybak@mesa7.mesa.colorado.edu>
To: qrp-1@Lehigh.EDU
Subject: [30744] Best Antenna Tuner Configuration for Short Random Wires????
Message-ID: <Pine.OSF.3.91.971114084713.6319C-1000000@mesa7.mesa.colorado.edu>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Does anyone have any recommendations concerning the best antenna tuner to use with a fairly short (say, around 30-35 ft) random wire when operating QRP portable on 40 meters and shorter wavelengths?

Thanks.

Jim W0KSD

Date: Fri, 14 Nov 1997 09:00:33 -0800
From: Brian Kassel <bkassel@dancris.com>
To: SNickrand@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [30745] Re: 73 Magazine
Message-ID: <346C83B1.6D0@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

SNickrand@aol.com wrote:

>
> I just recieved my 73 magazine. Seems like it's getting later and later.
> Also, where is the "annual" QRP issue.
> Seems like the magazine has gone downhill over the past 5 months or
> so.

Bill et all:

I received a rather long form letter from 73, almost begging for articles, as I had done a couple in the past for the publication. IMHO, I don't see a big future for their niche in the Ham Radio world. Having been subscriber since the very first issue, gladly, I let it expire, with no plans ever to renew.

If I need a dose of insane ramblings to complete my day, their are plenty of other sources available, and too many other excellant sources of QRP and RF building info. Times change.

Date: Fri, 14 Nov 1997 11:33:20 -0500
From: Al Moyle <moyle@essc.psu.edu>
To: qrp-1@lehigh.edu
Subject: [30745] Re: 73 Magazine
Message-ID: <3.0.32.19971114113320.005d29d0@pop3server.essc.psu.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 09:00 AM 11/14/97 -0800, you wrote:

>
> I received a rather long form letter from 73, almost begging for
> articles, as I had done a couple in the past for the publication.

You know, I've had the feeling that they don't have enough stuff to fill up the available pages. It appears to me that the font size they are using has been getting bigger ...

73,
Al N3KFL

Date: Fri, 14 Nov 1997 09:36:31 -0800
From: Brian Kassel <bkassel@dancris.com>
To: PaulKB8N@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [30746] Re: link tuners size disadvantage
Message-ID: <346C8C1F.B7B@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

PaulKB8N@aol.com wrote:

>
> In a message dated 97-11-13 09:37:15 EST, bobbach@cetlink.net writes:
>
> << L. B. Cebik wrote:
> >
> > > I have saved some 55 messages so far related to interest in the
> > > re-emergence of a link-coupled tuner on the market--and I know some did
> >
> > I am looking forward to your tutorial.
> >
> > Chuck, KE9UW
>
> >>
> Link coupled tuners have but one disadvantage, size. Generally, large coils
> must be used. Also, enclosures must be fairly large. I wonder if anyone
> has tried fabricating a link-coupled coil assembly on a ferrite rod and with
> what results?
>

The now-defunct ZM-1 used a toroid. Really works well (I have two).
Looking forward to a newer version by Rpy Gregson. I understand
that he may have located a new source for the 2 variable poly caps.
The loss is less than just about any other commercial unit, and
I have never encountered a situation where the unit could not
easily match down to 1:1 SWR.

I am a VERY satisfied user of the ZM-1.

Date: Fri, 14 Nov 1997 11:57:41 -0500 (EST)
From: n4js@pobox.com
To: Zack Lau <z1au@arrl.org>
Cc: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [30747] Re: Border Operations
Message-ID: <XFMail.971114115741.n4js@pobox.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 8bit
MIME-Version: 1.0

On 14-Nov-97 Zack Lau typed:

>The ARRL WAS rules don't go into detail about border operation,
>though it is stated that the stations contacted must be "land
>stations."

It would seem if I submit a QSL from K5F0 which says he is operating portable in Texas, and another QSL which says he is operating portable in NM (for example) there should be no question I confirmed 2 states.

Sent at 11:57:41 on 14-Nov-97

John L. Sielke n4js@pobox.com n4js@amsat.org
| \ | | | | _ | | / _ | n4js@qsl.net NJ Grid:FM29LN
| . ' | | _ _ | | | \ _ _ \ http://www.qsl.net/~n4js
| _ | \ _ | | _ | \ _ _ / | _ _ / NJ-QRP #57 QRP-L #884 QRP-ARCI #9328
NE-QRP #507 G-QRP #9544 NorCal #1989 QCWA FISTS #2781 ARS #243
Home of: Argo505, Argo556, HW9, HW8, QRP+, ARK4, WM20, GM17, W7EL 40M,
Sierra, OHR400, NW80, SW160, SST20, SST30, 38 Spl, GQ40

Date: Fri, 14 Nov 1997 08:54:53 -0700
From: "Michael Fletcher" <k17ixi@mailcity.com>
To: qrp-1@Lehigh.EDU
Subject: [30748] EMTECH ZM-1 has a future!
Message-ID: <HADPOHFPHBANBAAA@mailcity.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I got an e-mail from Roy Gregson a couple of weeks ago in response to my query.

He wrote that he has found a new source for the poly variables he uses in the ZM-1 and plans to reintroduce the little tuner.

Stay Tuned!

72,
Mike KL7IXI
burning solder
in Vancouver
AZ ScQRPions, AK/QRP NorCal QRP-L
.38 Special, Sierra

Get your free and private web-based e-mail from our new partner at <http://www.mailexcite.com>

Date: Fri, 14 Nov 1997 17:39:13 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@Lehigh.EDU
Subject: [30748] FOX SUMMARY Nov 14th
Message-ID: <199711141739.RAA02388@chuck.dallas.sgi.com>

Gang,

For some reason I'm missing Jack W7QQQs second run at the fox. So wait until I get it in to start sending me email about your count being off. :-)

1997-1998 FOXHUNT SUMMARY SHEET
November 14, 1997

Total Number of Q's = 747 !!!

FOX SCORES

CALL	NAME	STATE	# of Q's
-----	-----	----	-----
W5FN	Tim	TX	81
K5OI	Tim	NM	69
N0UR	Jim	MN	69
AE9K	Brian	WI	65
W7QQQ	Jack	AZ	65
NQ7K	Mike	AZ	65
AB7TK	Randy	ID	64
VE7CQK	Paul	Canada	57
KI7MN	Bob	AZ	56
K8CV	Walt	MI	49
NR3Z	Marty	PA	47
N0TFI	Jess	CO	35
N8VAR	Ron	OH	25

```

+-----+
+
+          HUNTERS SCORES
+
+-----+

```

```

+
K0EVZ(11) W0CH(11) KB0PTE(6) KB0ROL(6) W0CLR(3) N0HJ(8)
          K0SU(2) N0TFI(9) KB0ZDF(2) N0UR(2) K0CD KB0PI WB0T(4)
          K0GJX(2) AA0ZZ(3) W00Q(4) W0RW(3) KM0II W0HEP
          WM0Q

```

```

+
K1MG(12) W1GM AA1MY(3) N10CJ(2) N1QQV(4) K10J(10) KA1AXY
          WA1QVM KC1FB W1LP/MM(4) AK1P(2) N1FN

```

```

+
W2UX(5) N2BRT AA2PF(5) W2PFS(2) N2TNN(2) N2TO K2VNM(3)
          N2VPK(2) K2SJB WZ2T K2VCO(9) WJ2V AA2VK N2SMH KV2X
          N2GO KJ2V

```

```

+
KJ3V(6) N3KFL N3XRV KA3WMJ(2) KA3EAJ(3) W03B(7) WD3P WV3J
          N3YSI N3NLT N3CEU W3PM

```

```

+
KU4AF(6) WB4EXW(6) K4CGY(3) WA4CMI(2) N4DD AE4IC(4) KK4KF(2)
          KS4L N4ROA(5) N4JS N4UY KC4MHM K4GT(2) KS4L K4WZ(3)
          N4DD N4SO(4) WS4S(2) WD4MSM(3) AE4GX

```

```

+
KK5X0(4) N5ALO(2) KI5G K5ON(7) K5ZTY(6) KK6MC/5(10) N5JI(10)
          W5FN(10) W5HNS(6) AB5UA(10) W5XE K5FO(5) KQ5U(7)
          AA5CO(2) K5JHP(8) N5LU(6) K5W0(6) W5JH K5TZY
          K5UP(9) W5SP W5ZH KC5AI W5MN(3) NA5K W5JAY(2)
          W5SNS W5TFB(8) W5VB0(2) KC5AIK(2) K5AO W5SB(4) KA5T(7)

```

K5JUC KK5KU KJ5VW K5OI(7) NA5N K5LE(5) WA5WHN
N5ZN(2) KE5TC AF5Z(2) WA5YFY K5NZ(3) K5ID

+

N6XU(12) N6WG(4) K06KA(7) W6SIY(4) WE6W(9) WA6NAE(7) W6EMD(5)
K6RPN AA6R(2) KF6CTA(3) W6SU(6) AC6KW(8) KN6YD
W6ZH(5) KI6OY W6BAB(8) K6MW(3) WI6I W6EMT(3) N6VZ(4)
WA6GER AD6AY(3) AC6LA(3) W6EV(3) N6GA KD6VIO(2)
WA6HHQ K6VNX(4) W6SV N6KR K6MR K6YR N6MM(2)

+

NQ7X(12) AB7TT(10) KU7Y(10) N7VE(11) W7QQQ(10) AB7TK(9) WW7Y(7)
AB7ST(6) N7CTJ(3) W7SSM(6) N7GS(6) NQ7K(3) KI7MN(2)
N7CQR(2) AB7MY(8) KJ7YN W7GVN(2) AB7OA(5) NI0A(4)
KG7PV N7KT(5) KA7NOC(3) AB7GO WJ7H W7JDZ(2) N7MFB(2)
K7DBV N7XJW

+

KA8OKH(9) KC8EPA WQ8RP W8KC(3) K8DD(2) KB8MCZ WD8KQY(2)
K8CV(4) KB8AZ WA8GHZ(2) WB8E W8SFF

+

NF9K(3) WA9YLB W9UQB(4) N9DD(4) KB9IUA(3) N9KW(2) W9KVF(5)
WA9PWP(2) AF9T(3) W9DZ NN9K WB9HFK W9UQV

+

AL7FS(2)

+

VE3ELA(5) VE3JC(2) VE5RC(8) VE5SP VE6GK(2) VE7CQK(6) VE6NJK(2)

Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/index.html>

Date: Fri, 14 Nov 1997 13:23:54 -0500
From: Zack Lau <zlau@arrl.org>
To: qrp-l@lehigh.edu
Subject: [30749] Re: W1VT/KH6 15M operation
Message-ID: <346C973A.5DE0@arrl.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Unless I'm running a pileup, I tend to move around a bit
to avoid the QRM I can't hear. I do tend to move up above
.060, rather than down the band. I won't be taking any
skeds, though you might check the weather reports to make
sure the weather is nice and sunny Zack W1VT

Date: Fri, 14 Nov 1997 10:45:42 -0800 (PST)
From: Stanley Wilson <microres@crl.com>
To: qrp-1@lehigh.edu
Subject: [30750] Spice
Message-ID: <Pine.SUN.3.91.971114103813.24948B-100000@crl9.crl.com>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Well I got it all loaded up on my machine (486) version RCVG 34.

Now does anyone have a single stage RF or audio circuit using a 2N2222 modeled that they would like to share with us?

Would be nice to take something someone has done and play with it and maybe share info back and forth either via e-mail or the list ?

DEMO - How does your demo run? Mine seems to run to fast for me to read the text. I exit out off Windows 95 directly into MS-DOS. Did not try the DOS prompt. Anyway guess some of the delay timers in the DEMO pgm are set up for a slower machine. And I think my machine is slow. :-)

Be sure to get the version that Chuck pointed to via ftp. The version with Book "Inside Spice" is version 33. The ftp version is newer 34.

Lets Play ----- Name of the game is amplifiers using a 2n2222

your entry can be a RF or audio one...

Cheers, Stan AK0B

Date: Fri, 14 Nov 1997 14:18:10 -0500 (EST)
From: Jim Eshleman <lujce@hooch.cc.Lehigh.EDU>
To: microres@crl.com
Cc: qrp-1@Lehigh.EDU
Subject: [30751] Re: Spice
Message-ID: <97Nov14.141815-0500_est.10421-22436+6@hooch.cc.Lehigh.EDU>
Content-Type: text

> Now does anyone have a single stage RF or audio circuit using a 2N2222
> modeled that they would like to share with us?

Stan,

K5FO posted a 2n2222 RF amp, and K06KA posted a 4MHz xtal osc. I've stored those in the QRP-L archives. Fetch via anon FTP:

ftp://ftp.lehigh.edu/pub/listserv/qrp-l/spice/2n2222-rf-amp.txt
ftp://ftp.lehigh.edu/pub/listserv/qrp-l/spice/2n2222-4mhz-osc.txt

or send these commands, in the body of an e-mail, to listserv@Lehigh.EDU:

GET QRP-L/SPICE 2n2222-rf-amp.txt
GET QRP-L/SPICE 2n2222-4mhz-osc.txt

73
Jim N3VXI

Date: Fri, 14 Nov 1997 19:30:26 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@lehigh.edu
Subject: [30752] FOX SCORES V2.0 Nov 14th
Message-ID: <199711141930.TAA02786@chuck.dallas.sgi.com>

Gang,

OK, thanks for the feedback. Maybe I have it almost right. This takes time and energy. :-) Who would have ever thought that anyone could have gotten this many QRPers on the air during the middle of the week and exchanging signal reports and hopefully having fun and learning how to operate just a little bit better? Keep up the good work. We are way ahead of last years scores.....

1997-1998 FOXHUNT SUMMARY SHEET
November 14, 1997

Total Number of Q's = 898 !!!

FOX SCORES

CALL	NAME	STATE	# of Q's
------	------	-------	----------

W7QQQ	Jack	AZ	65 + 70 = 135
W5FN	Tim	TX	81
K1MG	Mike	CA	81
K5OI	Tim	NM	69
N0UR	Jim	MN	69
AE9K	Brian	WI	65
NQ7K	Mike	AZ	65
AB7TK	Randy	ID	64
VE7CQK	Paul	Canada	57
KI7MN	Bob	AZ	56
K8CV	Walt	MI	49
NR3Z	Marty	PA	47
N0TFI	Jess	CO	35
N8VAR	Ron	OH	25

+-----+	
+	+
+	HUNTERS SCORES
+	+
+-----+	

+	
K0EVZ(13) W0CH(13) KB0PTE(6) KB0ROL(6) W0CLR(5) N0HJ(9) K0SU(2) N0TFI(10) KB0ZDF(3) N0UR(3) K0CD KB0PI WB0T(6) K0GJX(2) AA0ZZ(5) W00Q(4) W0RW(4) KM0II W0HEP WM0Q K0FRP K0HUU KQ0I WB0ROQ	+
K1MG(13) W1GM AA1MY(4) N10CJ(2) N1QQV(5) K10J(12) KA1AXY WA1QVM KC1FB(2) W1LP/MM(4) AK1P(3) N1FN	+
W2UX(5) N2BRT AA2PF(6) W2PFS(4) N2TNN(2) N2TO K2VNM(3) N2VPK(3) K2SJB WZ2T K2VCO(10) WJ2V AA2VK N2SMH(2) KV2X N2GO(2) KJ2V	+
KJ3V(8) N3KFL N3XRV KA3WMJ(3) KA3EAJ(3) W03B(9) WD3P WV3J N3YSI N3NLT N3CEU W3PM NR3Z	+
KU4AF(8) WB4EXW(8) K4CGY(3) WA4CMI(2) N4DD AE4IC(5) KK4KF(2) KS4L N4ROA(7) N4JS(2) N4UY KC4MHM K4GT(2) KS4L K4WZ(4) N4DD N4SO(5) WS4S(2) WD4MSM(5) AE4GX K4PYM KS4HQ	+
KK5X0(4) N5ALO(3) KI5G K5ON(7) K5ZTY(7) KK6MC/5(11) N5JI(12) W5FN(12) W5HNS(8) AB5UA(12) W5XE K5FO(5) KQ5U(9) AA5CO(2) K5JHP(10) N5LU(8) K5WO(6) W5JH K5TZY K5UP(11) W5SP W5ZH KC5AI W5MN(3) NA5K(2) W5JAY(2)	+

W5SNS W5TFB(11) W5VBO(3) KC5AIK(2) K5AO W5SB(5) KA5T(8)
K5JUC KK5KU KJ5VW K5OI(9) NA5N K5LE(6) WA5WHN(2)
N5ZN(4) KE5TC(3) AF5Z(2) WA5YFY K5NZ(3) K5ID(2) AC5IE(2)
N5JKY AA5TA

+

N6XU(14) N6WG(6) K06KA(7) W6SIY(4) WE6W(10) WA6NAE(8) W6EMD(5)
K6RPN AA6R(2) KF6CTA(3) W6SU(6) AC6KW(9) KN6YD
W6ZH(5) KI6OY W6BAB(8) K6MW(3) WI6I W6EMT(3) N6VZ(5)
WA6GER AD6AY(4) AC6LA(4) W6EV(3) N6GA KD6VIO(3)
WA6HHQ K6VNX(4) W6SV N6KR K6MR K6YR N6MM(2) W6KI

+

NQ7X(14) AB7TT(12) KU7Y(12) N7VE(12) W7QQQ(10) AB7TK(10) WW7Y(7)
AB7ST(6) N7CTJ(4) W7SSM(6) N7GS(6) NQ7K(4) KI7MN(4)
N7CQR(2) AB7MY(10) KJ7YN W7GVN(3) AB7OA(6) NI0A(6)
KG7PV N7KT(7) KA7NOC(3) AB7GO WJ7H(2) W7JDZ(2) N7MFB(2)
K7DBV N7XJW(3)

+

KA80KH(11) KC8EPA WQ8RP W8KC(3) K8DD(2) KB8MCZ WD8KQY(2)
K8CV(5) KB8AZ WA8GHZ(2) WB8E W8SFF W8RU

+

NF9K(4) WA9YLB W9UQB(6) N9DD(5) KB9IUA(3) N9KW(3) W9KVF(5)
WA9PWP(4) AF9T(5) W9DZ NN9K WB9HFK(3) W9UQV AE9K
N9AW

+

AL7FS(2)

+

VE3ELA(5) VE3JC(4) VE5RC(9) VE5SP VE6GK(2) VE7CQK(8) VE6NJK(4)
VE3SP

Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/index.html>

Date: Fri, 14 Nov 1997 12:21:45 -0700
From: torell@sicom.com (Kent Torell)
To: qrp-l@lehigh.edu
Subject: [30753] TEST: radio shack pocket dvm
Message-ID: <v02130500b0925255b320@[192.91.202.41]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Radio Shack (no pecuniary interest on my part, etc.) is offering their
pocket dvm on sale for \$17.99. Display will read up to 3.999, test leads
are hard wired. Runs on two watch batteries, included. Power consumption
is rated at 10mW, so they should last a while! Features:

10Meg input impedance
400V max, ac and dc
continuity beeper (you can send cw with this one)
3.1 oz
4 1/4 x 2 1/2 x 7/8 maximum dimensions when closed
2% absolute accuracy

Measured ac response: (by me, with our lab function generator)
Fluke 77 as a reference
accurate from 15 Hz to 200 Hz.
-3db at 1.5 KHz
-10 db at 4 KHz (still good for relative gain measurements)

Caveats:
no current measurement capability
cannot measure ac accurately with a dc component (e.g., bias voltage)
- this can be 'fixed' by using an external 0.1uF cap

This unit is cheaper, more accurate, much more relative precision, more rugged, and smaller than my 15 year old radio shack analog meter. I plan on using it when backpacking/camping/bumblebeeing. Also, it is good for measuring the circuit voltages around 2N2222's!

Kent Torell torell@sicom.com 602-607-4852
SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260

Date: Fri, 14 Nov 1997 14:10:18
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [30754] Re: 73 Magazine
Message-ID: <3.0.1.16.19971114141018.22b7c53a@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

> I received a rather long form letter from 73, almost begging for
>articles, as I had done a couple in the past for the publication.

I got the same letter, they do seem to be struggling for stuff. It's a real shame, and poor Wayne sure has his share of problems over the years. Not that any of it way *his* fault :-) Might be time for him to give it up.
>From the looks of things, it might be sooner than latter. Too bad.

72,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Fri, 14 Nov 1997 14:45:22
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@Lehigh.EDU
Subject: [30755] RE: Boarder operation
Message-ID: <3.0.1.16.19971114144522.22b7d9cc@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Since I operate on the boarder of insanity and that is a state of mind,
does it matter where I operate from? Physicaly or metaphysicaly?

Actually, I can get to the granite marker at the boarder of US and Canada
at the end of Vermont's Long Trail fairly easily, although, this event is in
April right? That could boarder on insanity! (Snow shoes for sure :-)

72,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Fri, 14 Nov 1997 12:52:03 -0700
From: Steve Galchutt <n0tu@webaccess.net>
To: "\"Low Power Amateur Radio Discussion\"> <qrp-l@lehigh.edu>
Subject: [30755] FS:HW-8 & HW Handbook
Message-ID: <346CABE3.41AD@webaccess.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I just realized I may never finish all the mods to my HW8. I thought
maybe someone else might be interested in doing so. So I'll offer it up
for a new home:

HW-8 80-15m QRP cw rig (non-origanal paint)
w/modifications per the HotWater Handbook:
- QSKed - relay removed (installed)

- New MOS-FET RX front-end (installed)
- Backlite dial & meter lite (installed)
- CWF2 Audio cw filter PCB built (not installed)
- RIT PCB built (not installed) RIT pot/control (installed)
- TiCK keyer chip & perf board (not installed)
- Non-original paint (front panel needs labels)
- Rig is working on 80 through 15m as is.
- Includes HW Handbook and HW manual & notes
- \$110 + shipping - 719 481-6561 eves or email

.....Steve > n0tu . .

email:N0TU@webaccess.net

homepage <<http://www.webaccess.net/~S&P>>

 Date: Fri, 14 Nov 1997 19:57:55 GMT
 From: adams@chuck.dallas.sgi.com (Chuck Adams)
 To: qrp-l@Lehigh.EDU
 Subject: [30756] 2N2222(A) SPICE models
 Message-ID: <199711141957.TAA02935@chuck.dallas.sgi.com>

For the SPICE modelers in the group. This from the National Semiconductor web page of SPICE models. I am in the process of gathering all the models I can from all the vendors for all FETs, BJTs, etc. and will put them on the ftp site in one place. Thus, saving us all some time.

I will get Philips, Motorola, and TI as well as others as I run into them.

FYI

```
.model PN2222 NPN(Is=14.34f Xti=3 Eg=1.11 Vaf=74.03 Bf=255.9 Ne=1.307
+
+   Ise=14.34f Ikf=.2847 Xtb=1.5 Br=6.092 Nc=2 Isc=0 Ikr=0 Rc=1
+   Cjc=7.306p Mjc=.3416 Vjc=.75 Fc=.5 Cje=22.01p Mje=.377 Vje=.75
+   Tr=46.91n Tf=411.1p Itf=.6 Vtf=1.7 Xtf=3 Rb=10)
*   National      pid=19      case=T092
*   88-09-07 bam   creation

.model PN2222A NPN(Is=14.34f Xti=3 Eg=1.11 Vaf=74.03 Bf=255.9 Ne=1.307
+
+   Ise=14.34f Ikf=.2847 Xtb=1.5 Br=6.092 Nc=2 Isc=0 Ikr=0 Rc=1
+   Cjc=7.306p Mjc=.3416 Vjc=.75 Fc=.5 Cje=22.01p Mje=.377 Vje=.75
+   Tr=46.91n Tf=411.1p Itf=.6 Vtf=1.7 Xtf=3 Rb=10)
*   National      pid=19      case=T092
```

* 88-09-07 bam creation
Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/index.html>

Date: Fri, 14 Nov 1997 19:56:02 +0000
From: Ed Loranger <we6w@qsl.net>
To: kd1jv@moose.ncia.net
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [30757] Re: Boarder operation
Message-ID: <346CACD2.3754@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

In the house, on the Border, was a Boarder, without
his rig could be no Bored-er.

Hmmmm.

-Ed

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8,0HR-100, Pixie2, Johnson Viking II, Drake TR-3
QRP-L#1068,ARCI#9397,Norcal#2227,ARS#275,AR#112 grid CM88ok
<mailto:we6w@qsl.net> <http://www.qsl.net/we6w>

Date: Fri, 14 Nov 1997 15:05:34 -0500 (EST)
From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
To: qrp-l@Lehigh.EDU
Subject: [30758] Re: Spice
Message-ID: <97Nov14.150548-0500_est.10421-15266+1@hooch.cc.Lehigh.EDU>
Content-Type: text

Gang,

Thanks to Glen VE3DNL, a nice (all 2n2222!) DC receiver discussion including
a simple spice model for a 2n2222 mixer.

Archive: spice (path: qrp-l/spice) -- Files:

2n2222-rf-amp.txt (1 part, 2271 bytes) -- 2n2222 RF Amp - K5FO

2n2222-4mhz-osc.txt (1 part, 1793 bytes) -- 2n2222 4MHz XTAL Osc. - K06KA

2n2222-mixer.txt (1 part, 27172 bytes) -- 2n2222 mixer and DC rcvr notes -

VE3DNL

73
Jim N3VXI

Date: Fri, 14 Nov 1997 15:07:05 -0500 (EST)
From: Gary M Diana <gmdiana@kodak.com>
To: qrp-l@lehigh.edu
Subject: [30758] Re: 73 Magazine
Message-ID: <199711142007.PAA14839@kodaki.kodak.com>

from steve's (KD1JV) post:

> I received a rather long form letter from 73, almost begging for
> articles, as I had done a couple in the past for the publication.

I got the same letter, they do seem to be struggling for stuff.

On the other hand, if he needs articles, then there is the
opportunity to flood him with homebrew articles... if
they succeed in helping to sell the magazine, then the
homebrew/QRP "agenda" can be furthered.

If you have done something interesting in the hobby,
you should REALLY consider writing it up. Pick one of
the ham mags (QST, CQ, 73, Comm. Quarterly) or one of
the numerous QRP Journals (Sprat, QRPp, QRP Quarterly,
the other club journals) and submit it. It's a
rewarding (and addictive) experience.

73, Gary N2JGU
n2jgu@juno.com

Date: Fri, 14 Nov 1997 10:29:57 -0700
From: gsurrency@juno.com (Gary Surrency)
To: qrp-l@lehigh.edu
Subject: [30758] Re: 73 Magazine
Message-ID: <19971114.131922.10230.0.gsurrency@juno.com>

Heck, I'd just be happy if Ham Radio Magazine made a comeback. Ol' Wayne
always cursed them as renegades from his magazine who went off on their

own and started another publication.

Ham Radio was always a better rag then 73.

Sure is dissipoiting to see such a dearth of technical articles in the major ham magazines. If it weren't for some of the QRP publications, we'd really be in trouble.

72,

AB7MY

Gary Surrency

Chandler, AZ (Near Phoenix), QRP-L #571, AZ ScQRPions, ARRL VE

Date: Fri, 14 Nov 1997 14:25:35 -0600
From: n5inz@juno.com (John M Andrews)
To: qrp-l@Lehigh.EDU
Subject: [30759] Ponderings/note to Chas.
Message-ID: <19971114.142536.4086.13.N5INZ@juno.com>

Sorry for the bandwidth...Thanks, Chas- perfect! Juno ate my adr.
book(and
my homework). Much appreciated!

Been reading the mail regarding Z-Match postings. I posted something a while back regarding an old Marine band radio that used a piece of Air-Dux for the match to the antenna. Running thru one end were 2 pieces of round ferrite bar about 5-6". They were about 1/2" in diameter epoxied to the flat piece of 1/8th inch support for the coil. Seems that the engineers ran out of room for the coil. Maybe this would be an answer to those who feel the Z-Match is too "large". Two at each end of the main coils?

'nother topic- Collins,Murata, and others make some nifty small mass filters.

Most of the import stuff manages to stay at 455 kHz but the surplus Collins

may range 450,455,500 kHz. I've had pretty good luck at finding xtals in the junk-box for the 500/455 but the 450 seems to elude me.

I've been running tuning diodes to get the bfo on 450 but the drift is not cool.

Ceramic resonators are nice as they have a pretty far range. Problem: They work pretty well with a FET but tend to be a bit touchy with a 2n2222. Ideas?

Onward- Was just admiring my W6JAZ hand pump and wondering where he got the tension spring. By chance I had an old "D" cell battery holder near by. Guess that solves the problem for those making their own. Negative spring from a "D" cell holder.

Still snorting and snuffing with the flu but getting better.

72, John- N5INZ

Date: Fri, 14 Nov 1997 13:19:22 -0700
From: gsurrency@juno.com (Gary Surrency)
To: qrp-1@Lehigh.EDU
Subject: [30760] More mods for the HW-9 (LONG)
Message-ID: <19971114.131922.10230.2.gsurrency@juno.com>

For HW-9 owners, all others may hit delete if not interested.

VFO DRIFT FIXES

I've found some more areas of the HW-9 that need addressing. Everybody knows how badly the HW-9 drifts, so I have read everything that I could find that was been printed about curing the drift. I now have it down to at least tolerable levels, though some additional improvement is a definite possibility once I get some more capacitors with other temperature compensation values.

Note that most HW-9's drift upward in frequency, some as much as 3 Khz over an hour or so. Changing a single cap in the VFO circuit can counteract the drift, or at least it did on my rig. Receiver and transmitter frequency drifts upward, while the actual VFO freq. is downward.

So to begin with, here are some things to try:

Remove the VFO inductor shield for L118 and paint the inside of it with some flat black paint. Clean the paint off the solder tabs and outside of it with a cloth soaked in paint solvent so it can be re-installed. Allow the painted shield to dry thoroughly while you do the following steps.

Remove L118 - the VFO inductor - and check it to see if it is epoxy coated. Some HW-9's had this inductor coated with epoxy and they are reported to have the worst drift. Mine seemed to only be coated with RF shellac, as it has that characteristic smell that used to be common with all the old tube radio equipment inductors and chokes.

Whether or not it has epoxy or shellac coating, you can still try the following measures to see if you can stabilize it a bit. Use a hair blow-dryer, heat it up to a good temp but watch that you don't get it so hot that the cardboard form starts to turn color. My hair dryer would not go that high in temperature, but you should be careful with the inductor since you probably can't get another one. Once you have it good and hot, set it aside for 30 minutes or so to cool. Repeat this process at least four times.

Next, look at the components inside the VFO coil shield area, and move any caps and/or diode D118 so that no parts touch the coil shield when it is replaced.

Check your junkbox to see if you have a 33pf or 36 pf N150 to N220 disc cap. Replace C184 with this value. I used a 36pf N220 in mine and the VFO freq. drift has decreased to only 400 hz (downward in freq.) in the first thirty minutes, stabilizing within a few hz after 30 minutes. Try another N-value if you don't get good results with this recommendation.

I noticed that by taking a plastic drinking straw, and blowing gently on *only* NPO caps C186 and C188 there was a big decrease in VFO frequency. So although they are NPO's - they don't seem to be very temperature stable.

They are also outside of the VFO inductor shield, so they are exposed to a different environment than the caps within the VFO inductor shield. With the HW-9's cover on this might not pose such a problem, but I would like to try some other NPO's for these caps or maybe some that have negative temperature coefficients. Just be aware that these caps are a potential problem for temp. stability since they are exposed and have a large influence on the VFO freq.

Compensating C184 inside the VFO inductor shield is not a cure-all, but it helped a lot with my rig. I would recommend not adding dial or meter lamps to the rig, since that would present a large source of heat that would adversely affect the temp. stability.

T/R CIRCUIT CHANGES

There was a mod by S.W. McLellan, ND3P, to the T/R switching circuit that appeared in QEX for October 1990 and was later reprinted in the ARRL's

"QRP Power" book. It is fairly involved, but is said to increase the sensitivity on 12m and 10m. Plus, it also cures a problem of transmitted RF getting into the receiver circuits, particularly the receiver R12 power source. At RF output levels just a little above 1/2 watt to 1 watt, D407 starts to rectify some of the transmitted RF and places a negative potential on the positive R12 line that goes toward ground potential on transmit and should stay close to 0.4 or 0.5 volts. The rectified RF drives the R12 line more negative and upsets the base - emitter junction of Q103 in the VFO RIT circuit. This is a bad thing.

If you listen to the transmitted signal of the HW-9 on another receiver while you vary the rig's output with the CW level control, you will detect a big change in the transmitted frequency. Not only that, the RIT control that is supposed to be deactivated during transmit has a considerable effect on the transmitted frequency! Because of this, your TX offset that is supposed to be determined *only* by the BFO being pulled 700 hz lower in frequency won't be correct at all. And this problem varies from band-to-band with different power levels. What a pain this is!

In addition, the TX return adjustment provided by R131 is badly upset by the negative R12 voltage applied to Q103's base. If you put your digital voltmeter on Q103's emitter, you will see what I'm talking about. The rig's frequency wanders all over the place with CW level adjustments and RIT position during transmit. Here's how to fix it. One way is simple, the other is not.

You can elect to do the full T/R mod as suggested by ND3P in QEX or the reprint in QRP Power. This requires removing the T/R printed circuit board and adding some genuine PIN diodes, a transistor, and changing a few additional parts. It is pretty difficult to do, but the reward is said to be improvement sensitivity on 10m and 12m. I decided to pass on it because of the complexity involved.

There is simpler fix I have come up with. Clip and lift one end of R132, a 10K 1/4 watt resistor on the OSC printed circuit board. Try to leave a little bit of lead between the resistor lead and its body, and the clipped end at the PCB. Solder a 1N4148 or 1N914 silicon diode between the clipped leads, with the cathode (banded) end facing toward Q103's base lead. You're done! Now if you check the freq. while changing the transmitted output level with the CW Level control, the transmitted frequency is rock stable. Similarly, the RIT control during transmit will have *no* effect on the transmitter's frequency at all. Success!

Note that the TX Return adjustment with trimmer R131 is stable now, and it does not change the voltage at the measurement end of R127 when you set it with your DVM and vary the CW Level control. Put a 5.6K or 6.2K resistor across R131 if you want it to be less critical to adjust.

The addition of the diode in Q103's base lead prevents the R12 voltage that goes increasingly negative during higher RF output levels from upsetting Q103 and varying the voltage on RIT diode D118. The rig sure is stable now, at any power level and on all bands. No doubt this fix makes the rig sound better on the air, and when you change the RIT control during a QSO, your transmitted frequency will stay put.

BFO TX OFFSET ADJUSTMENTS

With the transmitted frequency now stable, regardless of power level or RIT position, you might want to check the TX offset frequency to see if it is 700 hz as it should be. Using a freq. counter or separate receiver, check the freq. at TP104 on the OSC board. Set it to 8.831400 Mhz with L135 through the hole in the metal shield.

With the CW Level turned down to prevent the PA transistors from overheating, check to see if the freq. changes to 8.830700 Mhz during transmit. Or, if you are using another transceiver to check the frequency, you'll need to allow a small amount of transmitter output in order to hear the HW-9's signal while using a dummy load. See if the transceiver you use for calibration has a 700hz TX offset and adjust it if necessary. My TS-570D tracks its CW sidetone with the TX offset freq., so it is easy to match the HW-9's received audio frequency with the TS-570D's sidetone and then listen to the HW-9's signal on the TS-570D for the same audio note. No re-tuning of either rig's tuning knob should be needed when the BFO (TX) offset is correct.

If the TX offset is not close to 700 hz, you'll need to change capacitor C205 under the BFO shield. I used IC socket pins and selected a 75 pf silver mica cap from seven or eight I had on hand until I got a 717 hz TX offset. You could also use a combination of a smaller fixed cap of 47pf or so, and a tiny trimmer of 6-30 pf if you want to set it to exactly 700 hz.

MORE ABOUT THE T/R CIRCUIT

While I was investigating the problem of poor RF isolation in the T/R switching and the effect it has on the R12 control voltage, I noted some things worth mentioning. Diode D407 is under a great deal of stress. On my rig, the output on 80m can be as high as 8 or 9 watts if you aren't careful with the CW level control position. This much RF voltage can possibly destroy the 1N4149 diode used at D407, since it is essentially across the PA's at T403 right before the output filter network. If D407 fails (and it did fail once in my rig), it shunts all of the PA output and the PA transistors are in danger of destruction. If this happens, you will hear the power supply groan a loud buzz, and the output on the relative power meter will go very low. If this happens, stop

transmitting immediately and change D407!

I put some IC socket pins on the PCB where D407 goes, and tried some diodes to see which ones allowed the best RF isolation and best receiver sensitivity without modifying the bias circuitry as Heath designed it. A number of 1N4148's and 1N4149's (the same as Heath's pn. 56-56) were tried. Some got pretty warm when the output level exceeded 5 watts. Normally, you wouldn't exceed 5 watts in operation - but you might during tune-up or on 40m and 80m where a lot of output is available. I suggest you check your HW-9 by touching D407 after (not during, or you'll get a small RF burn!) a few seconds of 5 watts or greater output. If D407 is warm to the touch, you have a problem. You are also potentially losing some RF on 10m and 12m that is needed. The risk to D407 is greatest on 80m, where the RF output is maximum.

I tried several diodes in place of D407, including 1N4007's and even some 1N5767 PIN diodes. The 1N4007's got very hot and leaked too much RF into the receiver and the R12 control circuit. The 1N5767 PIN diode failed quickly when the output went past 4 or 5 watts, since it is not biased adequately with the given circuit. I finally found a 1N4149 or two that remained cool, even at RF levels of up to 9 watts on 80m. No other changes were made.

Rather than redesign the whole circuit or do the ND3P mod, I settled on a hand-selected 1N4149 diode for D407. It leaks only a little RF during transmit into the R12 control circuit, and the diode added to Q103's base described earlier corrects that problem. The receiver sensitivity is good, but if your HW-9 lacks sensitivity - look at possible low BFO injection into the product detector. Low BFO output at the TX /OUT point on the schematic will also limit the transmitted output level, as will low VFO output. Check these areas, and the previous HW-9 mods I wrote about concerning the transmitter stages.

You might want to put a voltmeter on your HW-9's R12 level and verify it does not go dangerously negative during full transmitter output. That could potentially harm some other components, although a reverse-biased diode across R12 to ground would hold it to -0.6 volts - just in case. That might occur at high SWR levels or if you happen to accidentally transmit into an open load. Just keep in mind that excessive RF passed through D407 represents a loss of desired transmitter output, and possible problems with other areas of the transceiver.

MOD THE MUTE CIRCUIT

You should definitely do the mod to the mute lead of U301 that ND3P suggests, as this quiets another source of audio pops and prevents the S-meter from incorrectly displaying AGC voltage during transmit. It is simple, and easy to perform. See either the ARRL's book "QRP Power", or

QEX for October 1990.

SUMMARY

With the added VFO stability and lack of frequency shift under varying RF output and RIT operation, I know you will enjoy your HW-9 much more. Much credit also goes to the contributors of the HW-8 handbook, and other articles found in QST, QEX, etc. Those sources are a good place to look if you want additional information on improving your HW-9.

72,

AB7MY

Gary Surrency

Chandler, AZ (Near Phoenix), QRP-L #571, AZ ScQRPions, ARRL VE

Date: Fri, 14 Nov 97 15:26:22 EST
From: Bill Acito 14-Nov-1997 1524 <acito@asdg.ENET.dec.com>
To: -qrp@us1rmc.bb.dec.com
Cc: acito@asdg.ENET.dec.com
Subject: [30759] Call _history_ servers?
Message-ID: <9711142026.AA00987@us1rmc.bb.dec.com>

Anyone aware of any call sign servers on the internet that will give you the call's previous 'owners', or one I could look up my original novice call and check for sure what the first year was that I was lisenced? I'd rather avoid the \$20 charge they advertise in the back of QST if I can DIY.

Bandwidth minimization--

Responses via direct email please; if anyone else would like the info, email me. I will forward when (and if) there is a source.

Bill W1PA (trying to do the previous owner, Logan Walker, proud)

. - I own my own words -
Bill Acito acito@asdg.enet.dec.com
|d|i|g|i|t|a|l| Digital Equipment Corporation Hudson, MA
(sale pending ;-)

W1PA qrp-ne qrp-l adv-rs arci norcal amsat-na arrl-life

Date: Fri, 14 Nov 1997 15:42:39 -0500
From: "Bob Kellogg" <ae4ic@nr.infi.net>
To: <PaulKB8N@aol.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [30759] Re: link tuners size disadvantage
Message-ID: <199711142053.PAA07259@mailhost.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Paul,

Link tuners are not necessarily bulky. The coils can, indeed, be wound on ferrite cores. EMTECH's ZM-1 was an example. It is very efficient, and in a box about 2" X 3" X 5". Power is limited to about 15 watts, of course.

Bob Kellogg, AE4IC, Greensboro, NC
Probably, but not nececelery. -- Benny Hill

> Link coupled tuners have but one disadvantage, size. Generally, large
coils
> must be used. Also, enclosures must be failrly large. I wonder if
anyone
> has tried fabricating a link-coupled coil assembly on a ferrite rod and
with
> what results?
>
> Paul, KB8N

Date: Fri, 14 Nov 1997 17:00:16 -0800
From: Terres Family <terresfm@ncia.net>
To: qrp-l list <qrp-l@lehigh.edu>
Subject: [30760] Re: 73 Magazine
Message-ID: <346CF420.770D@ncia.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Seems like everyone is dumping on 73, maybe its dying I don't know.
I suspect (only guessing here) 73 owed index an ad or just made an error.
I own a QRP+ and wondered a bunch about it too.
I have enjoyed that magazine alot and have often found infomative
articles that have made it well worthwhile FOR ME. Like the ones on how

modems work that I would never have come accross elsewhere. The editor does like to rave on and on and if you enjoy that ok but if not then you don't read it. The reviews tend to be on worthwhile stuff. And there's a fair number of homebrewing articles. I favor keeping the code requirement so we differ stongly there. He's willing to print an article that says "yeh maybe rf can cause brain tumors and leukemia and maybe you should be a little bit careful & here's the state of the art in knowledge about that as it stand right now.." (Heck in todays world we get bombarded with rf from all over the place) Other publishers wouldn't dare print something like that because advertisers would get angry and the "membership" might not like it.

I like that about him, I think that's ok. I don't agree with a whole lot of what he says, but that's ok too. It's his magazine and he can do what he wants with it. If you can write a decent article he'll probably print it. I still enjoy the magazine and I'd hate to see it disappear.

just throwin' in my 2 dits

72

jerry, aa1of

Date: Fri, 14 Nov 1997 21:27:18 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-l@Lehigh.EDU
Subject: [30761] CW Reflector
Message-ID: <199711142127.VAA03618@chuck.dallas.sgi.com>

Several have asked me about it, so here is the info to the group at large:

< * * * * * THE CW REFLECTOR * * * * * =
* >
__Subscribe To: Majordomo@qth.net with Body: subscribe cw
__Unsubscribe To: Majordomo@qth.net with Body: unsubscribe cw
__To post, send to cw@qth.net please, CW issues only
__For digest version, Subscribe to cw-digest through majordomo@qth.net
__For archives of postings, see web page <http://www.qth.net/cw-digest.archive>
__To contact list owner, email to owner-cw@qth.net

FYI

Chuck Adams K5FO CP-60 adams@sgi.com
<http://reality.sgi.com/adams/index.html>

Date: Fri, 14 Nov 1997 15:42:23 -0600
From: n5inz@juno.com (John M Andrews)
To: qrp-1@Lehigh.EDU
Subject: [30762] Contest: Rotten parts in shack
Message-ID: <19971114.154223.4086.14.N5INZ@juno.com>

I've been pondering a contest for those of us who are in the midst of getting our antler up in the air pending space and/or a work party to help. Whatever the reason... I've been looking thru my stuff and finding "real junk" that needs to go in the trash.

Here are the rules:

Name a *really* nasty thing that shows up in your junk-box that you have honestly tried to get rid of.

Examples:

1. Slide switches
2. Connectors that don't fit -anything-.
3. Gum wrappers from 1956.
4. Parts that defy identification.
5. Tubes that will work only in sockets that have a cost factor of 10x the
cost of the tube.

Post private E-mail and I will announce the top 10 at the end of the month.

Send your E-Mail entry to:
N5INZ@JUNO.COM

72, John

Date: Fri, 14 Nov 1997 15:48:37 -0600
From: Jim <kj5tf@mctc.com>
To: qrp-1@Lehigh.EDU
Subject: [30763] 6M QRP article in NORCAL QRPp
Message-ID: <346CC735.4491@mctc.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The latest QRPp from NORCAL is very interesting, all QRP'ers should try this publication and see if you like it.

Several articles caught my eye in the fall 97 issue.

"Get on 6M QRP the cheap way" by N6KP got my attention right away. He takes a Radio Shack or similar 49mHz FM xcvr and replaced the xmit and rcvr xtals and put this cheap rig on 52.525mHz!

Anyone now if he has email?

Anyway, I'll send him snailmail and ask a few more questions.

Has anyone in this group done this kinda thing?

I know some of these little things arnt true FM, but something else. Mr Berger says he gets 100mw and can get out 1/2 mile using the built in whip mounted on the headset, hi. I wonder what a beam and a few sunspots could do?

I'd consider adding a quality output filter if I put one of these on the ham bands also.

The mind wonders if a cordless fone handset (46mHz) or base station (49mHz) could be re-xtaled for 52.525? The handset would be more elegant as a xcvr wouldnt it, hi. Jim

Date: Fri, 14 Nov 1997 13:47:34 -0800
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: "QRP-L list server" <qrp-l@lehigh.edu>
Cc: <larsennnc@alaska.net>
Subject: [30764] Fox: calls heard, KI7MN fox
Message-ID: <199711142244.QAA18857@multi13.netcomi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Calls heard during a half hour near the end of KI7MN's fox run:

AF5Z
AB7TT
N0UR
NN9K
WA9PWP

WB0T
K5JHP
N0TFI
K5LE
K0EVZ
KA7O
KA80KH
AE4IC
N7GS
W00G
W1HUE
W5TFB
VE6NJK
AB5UA
K5ON
N6XU
N9KW
N5VA
W3PM
W5FN
K5WO
K5ZE
W2UX
WA6NAE
K6VNX
W5SB
AA0ZZ

Date: Fri, 14 Nov 1997 17:44:11 EST
From: nq2rp@juno.com (B/BAMS Club Station)
To: qrp-l@lehigh.edu
Subject: [30763] 73 Magazine, Wanye Green and the Past & Future
Message-ID: <19971114.174331.4551.0.nq2rp@juno.com>

Back when I was KA1YE, I got a check (It didn't bounce & I spent it long ago) from Wayne & Co. for an article on a QRP TX with a RX converter. This would allow one to get on the 30 Meter band without having to invest in a new rig. Wrote it, drew up the scematics, sent it in, got the check , and I am STILL waiting to see it published.

After it did not show up in print, I asked for permission to submit it to the club's newsletter as I wanted to let others duplicate it for their own use (nothing commercial, just other QRP'er and builders)...

I was informed that I could NOT submit it to another publisher, including the club newsletter as they had bought it. It's been 25 YEARS, and it is STILL not in print, and I no longer own my thoughts on the project. I sold the unit I built back about 5 years ago, and it is still in use by one of the locals here in WNY.

Wayne could offer me wealth exceeding my fondest dreams, and I wouldn't submit anything else to his rag. When it finally dies the death it has long deserved, I will throw a party, and hand out copies of "30 Meters for \$25" to all that attend. I will have to re-write the manuscript as it has long since vanished, but that would be easy and worth the effort...

Gee... I have a different call now, Hmmm....

So, what do I call myself if I re-submit it to someone now???????????

72/73, Keith, WB2VUO at the keys at B/BAMS

NQ2RP - QRP-L # 1294,

Byron/Bergen Amateur Microwaves System Club Station

Listen for our 10 Mtr Milliwattting Beacon: 125 mW @ 28.287 MHz

"Our night light runs more power than our Rig!!!"

Date: Fri, 14 Nov 1997 15:54:42 -0800

From: Brian Kassel <bkassel@dancris.com>

To: gmdiana@kodak.com

Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>

Subject: [30763] Re: 73 Magazine

Message-ID: <346CE4C2.53E9@dancris.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Gary M Diana wrote:

> > I received a rather long form letter from 73, almost begging for
> > articles, as I had done a couple in the past for the publication.

> If you have done something interesting in the hobby,
> you should REALLY consider writing it up. Pick one of
> the ham mags (QST, CQ, 73, Comm. Quarterly) or one of
> the numerous QRP Journals (Sprat, QRPp, QRP Quarterly,

> the other club journals) and submit it. It's a
> rewarding (and addictive) experience.

Gary is so right here. No matter which ham publication you choose, consider writing an article or two, for the reasons that Gary stated.

You wont get rich, but your spirit will be enriched for sure.

Some of the messages that have been posted here would qualify virtually as-is for several pubs. It's a shame for some of the talented on this list to just be available to us members.
Well, just as long as we all get to see the info first ;)

Date: Fri, 14 Nov 1997 16:20:09 -0600
From: "Phil, K6LS" <k6ls@amsat.org>
To: qrp-1@Lehigh.EDU
Subject: [30763] re: wood handles for your paddles
Message-ID: <346CCE99.CD4387BE@amsat.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

There has been quite a few inquiries about obtaining some of the exotic hardwoods such as the Bocote I mentioned in a previous posting.

Just so happens that I picked up the store catalog on the way out, and today I took a look through it.
They (The Woodworkers' Store) do sell some of the woods via mail order. Here is the info to contact the store(s) (they have 15 located throughout the US.)

The Woodworkers' Store

<http://woodworkerstore.com/>

1-800-403-9736 Free Catalog

1-800-279-4441 orders
612-478-8395 fax

I have no connections with the store, You might even want to check your local yellowpages or wood supply stores (even some large hobby stores might have some) to see if they

have something along the lines of what you are looking for.
(another possibility some may want to check out is Corian)

--

73 de Phil, K6LS

k6ls@qsl.net <or> k6ls@amsat.org
http://www.qsl.net/k6ls
DM79or, Arapahoe County, Colorado
ITU zone 7, CQ zone 4
QRP-L #612 NorCal #824
CQC #471 ARCI #8866

Date: Sat, 15 Nov 97 05:10:05 UT
From: "chuck munce" <k0gjx@classic.msn.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [30764] RE: 6M QRP article in NORCAL QRPP
Message-ID: <UPMAIL05.199711142322040872@classic.msn.com>

Jim

Yes it has been done, the crystals are worth more than the xcvsr!! But its FM
yuck...chuck

From: owner-qrp-l@Lehigh.EDU on behalf of Jim
Sent: Friday, November 14, 1997 15:48
To: Low Power Amateur Radio Discussion
Subject: 6M QRP article in NORCAL QRPP

The latest QRPP from NORCAL is very interesting, all QRP'ers should try
this publication and see if you like it.
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The mind wonders if a cordless fone handset (46mHz) or base station
(49mHz) could be re-xtaled for 52.525? The handset would be more elegant
as a xcvr wouldnt it, hi. Jim

Date: Sat, 15 Nov 97 05:11:29 UT
From: "chuck munce" <k0gjx@classic.msn.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [30765] RE: link tuners size disadvantage
Message-ID: <UPMAIL05.199711142322070075@classic.msn.com>

Paul

How efficient?? Has any one tested qrp tuners/ others?? Like the artical in
qst april/may 95?? chuck

From: owner-qrp-1@Lehigh.EDU on behalf of Bob Kellogg
Sent: Friday, November 14, 1997 14:42
To: Low Power Amateur Radio Discussion
Subject: Re: link tuners size disadvantage

Paul,

Link tuners are not necessarily bulky. The coils can, indeed, be wound on
ferrite cores. EMTECH's ZM-1 was an example. It is very efficient, and in
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> has tried fabricating a link-coupled coil assembly on a ferrite rod and
with
> what results?
>
> Paul, KB8N

Date: Fri, 14 Nov 1997 18:54:33 -0500 (EST)
From: Jerrydeen@aol.com
To: qrp-1@Lehigh.EDU
Subject: [30764] qrp stations in IA,NE,SD,MN
Message-ID: <971114185433_-1776840042@mrin47>

Just got some great news!! Ade Weiss WORSP will be at Hamboree
20/Midwest/Dakota Division in South Sioux City, NE May 29,30. Ade will
present a forum about qrp, and will have books for sale. All are welcome and
wanted! If you are a qrp op in any of the above states, drop me an e-mail at
private address. I want to meet you and make arrangements for informals as
well as how big a room do I get for Ade? Thanks Jerry WB0T

Date: Fri, 14 Nov 1997 17:59:30 -0600
From: n5inz@juno.com (John M Andrews)
To: qrp-1@Lehigh.EDU
Subject: [30765] re:rotten parts contest
Message-ID: <19971114.175930.4086.15.N5INZ@juno.com>

The contest is heating up.

I have seen some truly disgusting entries.

It's wonderful.

72, John- N5INZ

End of QRP-L Digest 909
